

* MINIMIZED COORDINATES FROM CHART

* DATE: 2/25/93

14: 18

CREATED BY USER: nau99

1639

1	1	ILE	N	-53.41835	-52.07964	96.86949	A1	1	0.00000
2	1	ILE	HT1	-54.06550	-53.37379	96.22549	A1	1	0.00000
3	1	ILE	HT2	-52.48505	-53.33354	96.89426	A1	1	0.00000
4	1	ILE	HT3	-53.81151	-52.85195	97.84341	A1	1	0.00000
5	1	ILE	CA	-53.29159	-51.45945	96.52548	A1	1	0.00000
6	1	ILE	CB	-54.51076	-51.09296	95.64551	A1	1	0.00000
7	1	ILE	CG2	-55.84867	-51.39510	96.33544	A1	1	0.00000
8	1	ILE	CG1	-54.43380	-49.65164	95.12978	A1	1	0.00000
9	1	ILE	CD	-55.55018	-49.30658	94.14124	A1	1	0.00000
10	1	ILE	C	-53.31306	-50.79352	97.88119	A1	1	0.00000
11	1	ILE	O	-53.76732	-51.45486	98.80000	A1	1	0.00000
12	2	LYS	N	-52.70566	-49.57271	97.98462	A1	2	0.00000
13	2	LYS	H	-52.43149	-49.07042	97.19065	A1	2	0.00000
14	2	LYS	CA	-52.72856	-48.82990	99.24363	A1	2	0.00000
15	2	LYS	CB	-51.40674	-49.22996	100.05168	A1	2	0.00000
16	2	LYS	CG	-51.65942	-50.46422	100.94226	A1	2	0.00000
17	2	LYS	CD	-50.39491	-50.76541	101.74483	A1	2	0.00000
18	2	LYS	CE	-50.65567	-51.67024	102.94896	A1	2	0.00000
19	2	LYS	NZ	-49.48784	-51.62033	103.84066	A1	2	0.00000
20	2	LYS	HZ1	-49.68891	-52.15413	104.71032	A1	2	0.00000
21	2	LYS	HZ2	-48.66152	-52.03086	103.36182	A1	2	0.00000
22	2	LYS	HZ3	-49.20787	-50.62063	104.08530	A1	2	0.00000
23	2	LYS	C	-52.58080	-47.37619	98.05749	A1	2	0.00000
24	2	LYS	O	-52.16561	-47.08993	97.74074	A1	2	0.00000
25	3	GLU	N	-52.93375	-46.48610	99.78817	A1	3	0.00000
26	3	GLU	H	-53.25920	-46.74733	100.69754	A1	3	0.00000
27	3	GLU	CA	-52.88416	-45.05669	99.49342	A1	3	0.00000
28	3	GLU	CB	-54.17633	-44.67728	98.75869	A1	3	0.00000
29	3	GLU	CG	-54.16941	-43.30721	98.07127	A1	3	0.00000
30	3	GLU	CD	-55.38365	-43.14902	97.16830	A1	3	0.00000
31	3	GLU	OE1	-55.40070	-42.20412	96.38367	A1	3	0.00000
32	3	GLU	OE2	-56.30088	-43.96983	97.23742	A1	3	0.00000
33	3	GLU	C	-52.73723	-44.30588	100.80334	A1	3	0.00000
34	3	GLU	O	-53.13310	-44.80269	101.85375	A1	3	0.00000
35	4	GLU	N	-52.10513	-43.13147	100.72198	A1	4	0.00000
36	4	GLU	H	-51.89913	-42.70887	99.83885	A1	4	0.00000
37	4	GLU	CA	-51.71490	-42.41569	101.93532	A1	4	0.00000
38	4	GLU	CB	-50.23606	-42.65775	102.23912	A1	4	0.00000
39	4	GLU	CG	-49.88908	-44.07273	102.69972	A1	4	0.00000
40	4	GLU	CD	-48.39447	-44.20822	102.86978	A1	4	0.00000
41	4	GLU	OE1	-47.71593	-43.20739	103.12446	A1	4	0.00000
42	4	GLU	OE2	-47.87485	-45.31826	102.72475	A1	4	0.00000
43	4	GLU	C	-51.86859	-40.92476	101.75610	A1	4	0.00000
44	4	GLU	O	-51.85445	-40.40438	100.64776	A1	4	0.00000
45	5	HIS	N	-51.98758	-40.25490	102.89941	A1	5	0.00000
46	5	HIS	H	-51.95529	-40.74179	103.77267	A1	5	0.00000
47	5	HIS	CA	-52.02510	-38.79739	102.88794	A1	5	0.00000
48	5	HIS	CB	-52.95268	-38.30654	104.00423	A1	5	0.00000
49	5	HIS	CG	-54.39292	-38.58657	103.64511	A1	5	0.00000
50	5	HIS	ND1	-55.01336	-38.04007	102.58831	A1	5	0.00000
51	5	HIS	HD1	-54.63216	-37.40030	101.93314	A1	5	0.00000
52	5	HIS	CD2	-55.29163	-39.42491	104.31043	A1	5	0.00000
53	5	HIS	NE2	-56.46563	-39.37373	103.63249	A1	5	0.00000
54	5	HIS	CE1	-56.29489	-38.51954	102.57197	A1	5	0.00000
55	5	HIS	C	-50.64149	-38.20241	103.06558	A1	5	0.00000
56	5	HIS	O	-49.75908	-38.78174	103.68940	A1	5	0.00000
57	6	VAL	N	-50.46014	-37.02655	102.46317	A1	6	0.00000
58	6	VAL	H	-51.22869	-36.59864	101.97707	A1	6	0.00000
59	6	VAL	CA	-49.12695	-36.41474	102.46428	A1	6	0.00000
60	6	VAL	CB	-48.60121	-36.23669	101.01420	A1	6	0.00000

FIG. 2

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61	6	VAL	CG1	-47.6	2	-36.30119	101.00126	A1	6	0.00000
62	6	VAL	CG2	-49.10544		-37.46647	100.11057	A1	6	0.00000
63	6	VAL	C	-49.19435		-35.00190	103.02675	A1	6	0.00000
64	6	VAL		-50.21018		-34.34041	102.87457	A1	6	0.00000
65	7	ILE	N	-48.11527		-34.52120	103.65431	A1	7	0.00000
66	7	ILE	H	-47.35972		-35.13148	103.91409	A1	7	0.00000
67	7	ILE	CA	-48.09506		-33.08697	103.98819	A1	7	0.00000
68	7	ILE	CB	-48.69197		-32.86813	105.39701	A1	7	0.00000
69	7	ILE	CG2	-47.96322		-33.71317	106.43001	A1	7	0.00000
70	7	ILE	CG1	-48.74316		-31.39586	105.81727	A1	7	0.00000
71	7	ILE	CD	-49.28846		-31.20489	107.23523	A1	7	0.00000
72	7	ILE	C	-46.69381		-32.50114	103.87753	A1	7	0.00000
73	7	ILE	O	-45.72315		-33.10109	104.32366	A1	7	0.00000
74	8	ILE	N	-46.61414		-31.32789	103.23109	A1	8	0.00000
75	8	ILE	H	-47.43598		-30.79777	103.00074	A1	8	0.00000
76	8	ILE	CA	-45.31176		-30.85113	102.75879	A1	8	0.00000
77	8	ILE	CB	-45.18096		-31.21426	101.24826	A1	8	0.00000
78	8	ILE	CG2	-46.47692		-30.98133	100.47371	A1	8	0.00000
79	8	ILE	CG1	-44.01581		-30.53590	100.51961	A1	8	0.00000
80	8	ILE	CD	-42.65515		-30.85297	101.12422	A1	8	0.00000
81	8	ILE	C	-45.00402		-29.37643	103.03239	A1	8	0.00000
82	8	ILE	O	-45.69216		-28.43922	102.63903	A1	8	0.00000
83	9	GLN	N	-43.86371		-29.19466	103.70229	A1	9	0.00000
84	9	GLN	H	-43.33777		-29.97409	104.05676	A1	9	0.00000
85	9	GLN	CA	-43.27910		-27.85712	103.71549	A1	9	0.00000
86	9	GLN	CB	-42.97213		-27.43231	105.14730	A1	9	0.00000
87	9	GLN	CG	-44.24353		-27.13894	105.94550	A1	9	0.00000
88	9	GLN	CD	-43.92932		-26.69043	107.36359	A1	9	0.00000
89	9	GLN	OE1	-44.59992		-27.05224	108.31811	A1	9	0.00000
90	9	GLN	NE2	-42.89278		-25.86874	107.50418	A1	9	0.00000
91	9	GLN	HE21	-42.31986		-25.58069	106.73881	A1	9	0.00000
92	9	GLN	HE22	-42.66204		-25.53260	108.41526	A1	9	0.00000
93	9	GLN	C	-42.00840		-27.79728	102.89330	A1	9	0.00000
94	9	GLN	O	-41.07030		-28.56703	103.06902	A1	9	0.00000
95	10	ALA	N	-42.01720		-26.84230	101.96835	A1	10	0.00000
96	10	ALA	H	-42.80016		-26.24022	101.81084	A1	10	0.00000
97	10	ALA	CA	-40.33464		-26.60034	101.15833	A1	10	0.00000
98	10	ALA	CB	-41.09424		-26.95993	99.69281	A1	10	0.00000
99	10	ALA	C	-40.41733		-25.14834	101.25674	A1	10	0.00000
100	10	ALA	O	-41.21138		-24.24680	101.50542	A1	10	0.00000
101	11	GLU	N	-39.11637		-24.95043	101.08226	A1	11	0.00000
102	11	GLU	H	-38.51800		-25.72332	100.86462	A1	11	0.00000
103	11	GLU	CA	-38.56697		-23.61077	101.26935	A1	11	0.00000
104	11	GLU	CB	-37.61570		-23.62729	102.46404	A1	11	0.00000
105	11	GLU	CG	-38.29740		-24.15021	103.73032	A1	11	0.00000
106	11	GLU	CD	-37.31724		-24.35236	104.86668	A1	11	0.00000
107	11	GLU	OE1	-37.72498		-24.91514	105.87939	A1	11	0.00000
108	11	GLU	OE2	-36.15746		-23.95826	104.74301	A1	11	0.00000
109	11	GLU	C	-37.79619		-23.17941	100.04756	A1	11	0.00000
110	11	GLU	O	-37.17390		-23.59314	99.37097	A1	11	0.00000
111	12	PHE	N	-37.86688		-21.67280	99.78525	A1	12	0.00000
112	12	PHE	H	-38.38856		-21.25141	100.37827	A1	12	0.00000
113	12	PHE	CA	-37.20863		-21.33691	98.59813	A1	12	0.00000
114	12	PHE	CB	-38.26225		-21.06791	97.51950	A1	12	0.00000
115	12	PHE	CG	-37.93682		-21.86124	96.27668	A1	12	0.00000
116	12	PHE	CD1	-38.35291		-23.20899	96.17465	A1	12	0.00000
117	12	PHE	CD2	-37.21678		-21.25353	95.22261	A1	12	0.00000
118	12	PHE	CE1	-38.04712		-23.95258	95.01356	A1	12	0.00000
119	12	PHE	CE2	-36.91098		-21.99741	94.06122	A1	12	0.00000
120	12	PHE	CZ	-37.32685		-23.34453	93.96022	A1	12	0.00000
121	12	PHE	C	-36.45949		-20.05659	98.90209	A1	12	0.00000
122	12	PHE	O	-37.00216		-18.95008	98.93077	A1	12	0.00000
123	13	TYR	N	-35.16677		-20.22034	99.15293	A1	13	0.00000
124	13	TYR	H	-34.71888		-21.10886	99.03348	A1	13	0.00000

FIG. 3

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125	13	TYR	CA	-34.44	-19.02891	99.57908	A1	13	7.00000
126	13	TYR	CB	-33.741	-19.31637	100.90471	A1	13	0.00000
127	13	TYR	CG	-33.63229	-18.04844	101.71489	A1	13	0.00000
128	13	TYR	CD1	-34.79192	-17.52707	102.32828	A1	13	0.00000
129	13	TYR	CE1	-34.69736	-16.35710	103.10470	A1	13	0.00000
130	13	TYR	CD2	-32.38328	-17.40687	101.86606	A1	13	0.00000
131	13	TYR	CE2	-32.29405	-16.23332	102.64552	A1	13	0.00000
132	13	TYR	CZ	-33.45188	-15.71594	103.26657	A1	13	0.00000
133	13	TYR	OH	-33.37191	-14.58930	104.06109	A1	13	0.00000
134	13	TYR	HH	-33.47343	-14.89238	104.98360	A1	13	0.00000
135	13	TYR	C	-33.46702	-18.52544	98.54525	A1	13	0.00000
136	13	TYR	O	-32.59456	-19.23915	98.06786	A1	13	0.00000
137	14	LEU	N	-33.65240	-17.25550	98.19697	A1	14	0.00000
138	14	LEU	H	-34.33538	-16.68306	98.64807	A1	14	0.00000
139	14	LEU	CA	-32.81168	-16.70428	97.14258	A1	14	0.00000
140	14	LEU	CB	-33.70274	-16.21044	96.00105	A1	14	0.00000
141	14	LEU	CG	-33.98219	-17.29674	94.96260	A1	14	0.00000
142	14	LEU	CD1	-35.16863	-16.92524	94.07539	A1	14	0.00000
143	14	LEU	CD2	-32.72461	-17.54798	94.13078	A1	14	0.00000
144	14	LEU	C	-31.93377	-15.56813	97.60481	A1	14	0.00000
145	14	LEU	O	-32.31049	-14.71998	98.40126	A1	14	0.00000
146	15	ASN	N	-30.73908	-15.58168	97.02166	A1	15	0.00000
147	15	ASN	H	-30.47955	-16.38705	96.48149	A1	15	0.00000
148	15	ASN	CA	-29.88530	-14.39297	97.02352	A1	15	0.00000
149	15	ASN	CB	-28.47094	-14.93729	97.29287	A1	15	0.00000
150	15	ASN	CG	-27.86774	-14.18957	98.46652	A1	15	0.00000
151	15	ASN	OD1	-28.47231	-13.98878	99.50693	A1	15	0.00000
152	15	ASN	ND2	-26.63329	-13.74712	98.26721	A1	15	0.00000
153	15	ASN	HD21	-26.12722	-13.93409	97.42633	A1	15	0.00000
154	15	ASN	HD22	-26.21377	-13.18778	98.98020	A1	15	0.00000
155	15	ASN	C	-30.09328	-13.70870	95.65633	A1	15	0.00000
156	15	ASN	O	-30.96066	-14.17929	94.92357	A1	15	0.00000
157	16	PRO	N	-29.35358	-12.64312	95.25454	A1	16	0.00000
158	16	PRO	CD	-29.47390	-12.14147	93.88390	A1	16	0.00000
159	16	PRO	CA	-28.34388	-11.89943	96.02164	A1	16	0.00000
160	16	PRO	CB	-27.47317	-11.32145	94.90180	A1	16	0.00000
161	16	PRO	CG	-28.40713	-11.06430	93.72211	A1	16	0.00000
162	16	PRO	C	-28.67201	-10.84560	96.98393	A1	16	0.00000
163	16	PRO	O	-28.49727	-10.81095	98.14625	A1	16	0.00000
164	17	ASP	N	-29.73099	-9.96981	96.45979	A1	17	0.00000
165	17	ASP	H	-30.06531	-10.06794	95.52595	A1	17	0.00000
166	17	ASP	CA	-30.07647	-8.75629	97.18869	A1	17	0.00000
167	17	ASP	CB	-30.80318	-7.83976	96.20071	A1	17	0.00000
168	17	ASP	CG	-30.22601	-6.44601	96.27578	A1	17	0.00000
169	17	ASP	OD1	-29.42577	-6.10216	95.40955	A1	17	0.00000
170	17	ASP	OD2	-30.58500	-5.71147	97.19272	A1	17	0.00000
171	17	ASP	C	-30.91226	-8.96778	98.44177	A1	17	0.00000
172	17	ASP	O	-30.52677	-8.65960	99.56331	A1	17	0.00000
173	18	GLN	N	-32.11780	-9.49744	90.20428	A1	18	0.00000
174	18	GLN	H	-32.36542	-9.81984	97.29256	A1	18	0.00000
175	18	GLN	CA	-33.10696	-9.57864	99.27949	A1	18	0.00000
176	18	GLN	CB	-34.05728	-8.37464	99.14180	A1	18	0.00000
177	18	GLN	CG	-33.36307	-7.07517	99.58476	A1	18	0.00000
178	18	GLN	CD	-33.97880	-5.85158	98.94046	A1	18	0.00000
179	18	GLN	OE1	-35.13776	-5.50918	99.12725	A1	18	0.00000
180	18	GLN	NE2	-33.14378	-5.16835	98.16624	A1	18	0.00000
181	18	GLN	HE21	-32.19859	-5.47544	97.99847	A1	18	0.00000
182	18	GLN	HE22	-33.43475	-4.32502	97.72302	A1	18	0.00000
183	18	GLN	C	-33.83924	-10.91598	99.26964	A1	18	0.00000
184	18	GLN	O	-33.74750	-11.68763	98.32391	A1	18	0.00000
185	19	SER	N	-34.51482	-11.16924	100.39831	A1	19	0.00000
186	19	SER	H	-34.63228	-10.43017	101.06649	A1	19	0.00000
187	19	SER	CA	-34.94474	-12.50816	100.83625	A1	19	0.00000
188	19	SER	CB	-35.43672	-12.36114	102.28173	A1	19	0.00000

FIG. 4

09013077 012698

189	19	SER	OG	-34.3	1	-11.87727	103.10841	A1	19	0.00000
190	19	SER	HG	-33.85	4	-12.63499	103.40254	A1	19	0.00000
191	19	SER	C	-35.97640		-13.29776	100.02197	A1	19	0.00000
192	19	SER	O	-36.49518		-12.86400	99.00144	A1	19	0.00000
193	20	GLY	N	-36.24917		-14.51787	100.53004	A1	20	0.00000
194	20	GLY	H	-35.87834		-14.79673	101.41380	A1	20	0.00000
195	20	GLY	CA	-37.08223		-15.47533	99.79192	A1	20	0.00000
196	20	GLY	C	-38.39897		-15.89747	100.44590	A1	20	0.00000
197	20	GLY	O	-39.10838		-15.10421	101.05171	A1	20	0.00000
198	21	GLU	N	-38.72023		-17.18722	100.25477	A1	21	0.00000
199	21	GLU	H	-38.03254		-17.84573	99.94375	A1	21	0.00000
200	21	GLU	CA	-40.11538		-17.64629	100.27114	A1	21	0.00000
201	21	GLU	CB	-40.54163		-17.64420	98.79559	A1	21	0.00000
202	21	GLU	CG	-42.00974		-17.90322	98.44054	A1	21	0.00000
203	21	GLU	CD	-42.16555		-17.98331	96.93169	A1	21	0.00000
204	21	GLU	OE1	-43.22010		-17.59671	96.43390	A1	21	0.00000
205	21	GLU	OE2	-41.23758		-18.43207	96.25678	A1	21	0.00000
206	21	GLU	C	-40.28326		-19.04137	100.89226	A1	21	0.00000
207	21	GLU	O	-39.32286		-19.78361	101.07437	A1	21	0.00000
208	22	PHE	N	-41.54286		-19.38051	101.22645	A1	22	0.00000
209	22	PHE	H	-42.30204		-18.76344	101.01655	A1	22	0.00000
210	22	PHE	CA	-41.84777		-20.63223	101.93252	A1	22	0.00000
211	22	PHE	CB	-41.76716		-20.31207	103.43794	A1	22	0.00000
212	22	PHE	CG	-41.45246		-21.48591	104.34752	A1	22	0.00000
213	22	PHE	CD1	-40.59481		-21.25886	105.44915	A1	22	0.00000
214	22	PHE	CD2	-42.01384		-22.76966	104.14562	A1	22	0.00000
215	22	PHE	CE1	-40.30109		-22.30643	106.34948	A1	22	0.00000
216	22	PHE	CE2	-41.72224		-23.81970	105.04232	A1	22	0.00000
217	22	PHE	CZ	-40.86722		-23.58408	106.14281	A1	22	0.00000
218	22	PHE	C	-43.25845		-21.11908	101.58028	A1	22	0.00000
219	22	PHE	O	-44.19436		-20.32985	101.55111	A1	22	0.00000
220	23	MET	N	-43.39639		-22.43138	101.32298	A1	23	0.00000
221	23	MET	H	-42.59132		-23.03279	101.30500	A1	23	0.00000
222	23	MET	CA	-44.70480		-23.04357	101.02967	A1	23	0.00000
223	23	MET	CB	-45.08326		-22.73266	99.57140	A1	23	0.00000
224	23	MET	CG	-46.39952		-23.35273	99.09264	A1	23	0.00000
225	23	MET	SD	-46.67153		-23.10231	97.33272	A1	23	0.00000
226	23	MET	CE	-47.47592		-24.67640	96.98955	A1	23	0.00000
227	23	MET	C	-44.60710		-24.56281	101.21411	A1	23	0.00000
228	23	MET	O	-43.70841		-25.13566	100.62115	A1	23	0.00000
229	24	PHE	N	-45.43241		-25.30285	101.99622	A1	24	0.00000
230	24	PHE	H	-45.17063		-26.26850	102.03772	A1	24	0.00000
231	24	PHE	CA	-46.72021		-25.11140	102.69060	A1	24	0.00000
232	24	PHE	CB	-47.06193		-23.70552	103.21139	A1	24	0.00000
233	24	PHE	CG	-46.27878		-23.27691	104.43188	A1	24	0.00000
234	24	PHE	CD1	-46.28203		-24.06677	105.60532	A1	24	0.00000
235	24	PHE	CD2	-45.58233		-22.04683	104.40480	A1	24	0.00000
236	24	PHE	CE1	-45.58915		-23.62279	106.75356	A1	24	0.00000
237	24	PHE	CE2	-46.89083		-21.60100	105.55271	A1	24	0.00000
238	24	PHE	CZ	-46.89594		-22.39162	106.72434	A1	24	0.00000
239	24	PHE	C	-47.88569		-25.61775	101.85776	A1	24	0.00000
240	24	PHE	O	-48.73152		-24.87778	101.36424	A1	24	0.00000
241	25	ASP	N	-47.89055		-26.94593	101.74049	A1	25	0.00000
242	25	ASP	H	-47.22437		-27.52403	102.20704	A1	25	0.00000
243	25	ASP	CA	-48.86501		-27.64762	100.90165	A1	25	0.00000
244	25	ASP	CB	-48.21052		-27.81535	99.52046	A1	25	0.00000
245	25	ASP	CG	-49.19634		-28.30012	98.47932	A1	25	0.00000
246	25	ASP	OD1	-49.75750		-27.46672	97.77589	A1	25	0.00000
247	25	ASP	OD2	-49.39656		-29.50745	98.36197	A1	25	0.00000
248	25	ASP	C	-49.18430		-28.98699	101.56183	A1	25	0.00000
249	25	ASP	O	-48.57317		-29.35714	102.56241	A1	25	0.00000
250	26	PHE	N	-50.15619		-29.70261	101.00377	A1	26	0.00000
251	26	PHE	H	-50.60050		-29.38662	100.15349	A1	26	0.00000
252	26	PHE	CA	-50.56030		-30.88701	101.54898	A1	26	0.00000

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253	26	PHE	CB	-51.78	-30.83090	102.82009	A1	26	0.00000
254	26	PHE	CG	-52.60356	-29.92038	102.57724	A1	26	0.00000
255	26	PHE	CD1	-52.50398	-28.55674	102.91777	A1	26	0.00000
256	26	PHE	CD2	-53.70380	-30.42265	101.99011	A1	26	0.00000
257	26	PHE	CE1	-53.58477	-27.68701	102.66706	A1	26	0.00000
258	26	PHE	CE2	-54.86474	-29.55076	101.74257	A1	26	0.00000
259	26	PHE	CZ	-54.76149	-28.18547	102.07912	A1	26	0.00000
260	26	PHE	C	-51.29340	-31.82500	100.51070	A1	26	0.00000
261	26	PHE	O	-51.63257	-31.38211	99.42184	A1	26	0.00000
262	27	ASP	N	-51.50640	-33.00225	100.89199	A1	27	0.00000
263	27	ASP	H	-51.30608	-33.34660	101.83544	A1	27	0.00000
264	27	ASP	CA	-52.05815	-34.11623	100.01741	A1	27	0.00000
265	27	ASP	CB	-53.56271	-34.25359	100.24733	A1	27	0.00000
266	27	ASP	CG	-53.82295	-35.66101	100.73899	A1	27	0.00000
267	27	ASP	OD1	-52.95640	-36.23164	101.40272	A1	27	0.00000
268	27	ASP	OD2	-54.89062	-36.19966	100.47314	A1	27	0.00000
269	27	ASP	C	-51.70102	-34.05698	98.54820	A1	27	0.00000
270	27	ASP	O	-52.51335	-34.10386	97.63254	A1	27	0.00000
271	28	GLY	N	-50.39045	-33.92246	98.35075	A1	28	0.00000
272	28	GLY	H	-49.78144	-33.80079	99.13160	A1	28	0.00000
273	28	GLY	CA	-49.88845	-33.86633	96.98221	A1	28	0.00000
274	28	GLY	C	-50.00090	-32.51821	96.28701	A1	28	0.00000
275	28	GLY	O	-49.04304	-32.03342	95.69731	A1	28	0.00000
276	29	ASP	N	-51.21573	-31.96145	96.33541	A1	29	0.00000
277	29	ASP	H	-51.93955	-32.39453	96.87595	A1	29	0.00000
278	29	ASP	CA	-51.52130	-30.85124	95.43198	A1	29	0.00000
279	29	ASP	CB	-52.38232	-31.44665	94.30287	A1	29	0.00000
280	29	ASP	CG	-52.46245	-30.54960	93.07581	A1	29	0.00000
281	29	ASP	OD1	-51.43429	-30.32445	92.44162	A1	29	0.00000
282	29	ASP	OD2	-53.56233	-30.10545	92.75048	A1	29	0.00000
283	29	ASP	C	-52.21461	-29.64631	96.07233	A1	29	0.00000
284	29	ASP	O	-52.39419	-28.59407	95.46732	A1	29	0.00000
285	30	GLU	N	-52.65130	-29.81701	97.32405	A1	30	0.00000
286	30	GLU	H	-52.34793	-30.57647	97.90251	A1	30	0.00000
287	30	GLU	CA	-53.43516	-28.70871	97.86160	A1	30	0.00000
288	30	GLU	CB	-54.71008	-29.18152	98.54724	A1	30	0.00000
289	30	GLU	CG	-55.04100	-29.71506	97.67444	A1	30	0.00000
290	30	GLU	CD	-57.13279	-29.50058	98.43828	A1	30	0.00000
291	30	GLU	OE1	-57.79466	-30.47326	98.78969	A1	30	0.00000
292	30	GLU	OE2	-57.48939	-28.34297	98.66447	A1	30	0.00000
293	30	GLU	C	-52.69655	-27.80995	98.82987	A1	30	0.00000
294	30	GLU	O	-52.13191	-28.20198	99.84476	A1	30	0.00000
295	31	ILE	N	-52.76110	-26.53268	98.46810	A1	31	0.00000
296	31	ILE	H	-53.28532	-26.29454	97.65353	A1	31	0.00000
297	31	ILE	CA	-51.98442	-25.52556	99.18511	A1	31	0.00000
298	31	ILE	CB	-51.81933	-24.32331	98.23317	A1	31	0.00000
299	31	ILE	CG2	-53.16329	-23.65625	97.91607	A1	31	0.00000
300	31	ILE	CG1	-50.75168	-23.33810	98.71478	A1	31	0.00000
301	31	ILE	CD	-50.41981	-22.27940	97.66271	A1	31	0.00000
302	31	ILE	C	-52.51316	-25.12446	100.56211	A1	31	0.00000
303	31	ILE	O	-53.70233	-24.97567	100.82175	A1	31	0.00000
304	32	PHE	N	-51.54696	-24.95576	101.46562	A1	32	0.00000
305	32	PHE	H	-50.59061	-25.06998	101.18020	A1	32	0.00000
306	32	PHE	CA	-51.85606	-24.57978	102.84494	A1	32	0.00000
307	32	PHE	CB	-50.76201	-25.18703	103.73391	A1	32	0.00000
308	32	PHE	CG	-51.19588	-26.22218	104.74893	A1	32	0.00000
309	32	PHE	CD1	-50.23927	-27.18148	105.15120	A1	32	0.00000
310	32	PHE	CD2	-52.49149	-26.22907	105.32111	A1	32	0.00000
311	32	PHE	CE1	-50.57386	-28.14516	106.12524	A1	32	0.00000
312	32	PHE	CE2	-52.82688	-27.19600	106.29575	A1	32	0.00000
313	32	PHE	CZ	-51.86606	-28.15152	106.69566	A1	32	0.00000
314	32	PHE	C	-51.84397	-23.87181	103.07985	A1	32	0.00000
315	32	PHE	O	-52.76581	-22.45086	103.62205	A1	32	0.00000
316	33	HIS	N	-50.69098	-22.57451	102.70813	A1	33	0.00000

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317	33	HIS	H	-50.04	-22.98834	102.10706	A1	33	0.00000
318	33	HIS	CA	-50.22	-21.21727	103.23242	A1	33	0.00000
319	33	HIS	CB	-49.65908	-21.51540	104.63303	A1	33	0.00000
320	33	HIS	CG	-49.22984	-20.32142	105.45366	A1	33	0.00000
321	33	HIS	ND1	-48.02826	-19.72793	105.37205	A1	33	0.00000
322	33	HIS	HD1	-47.28999	-19.92757	104.75923	A1	33	0.00000
323	33	HIS	CD2	-49.97214	-19.68828	106.45019	A1	33	0.00000
324	33	HIS	NE2	-49.20118	-18.70682	106.97086	A1	33	0.00000
325	33	HIS	CE1	-48.00110	-18.72654	106.30763	A1	33	0.00000
326	33	HIS	C	-49.11511	-20.78472	102.29629	A1	33	0.00000
327	33	HIS	O	-48.59725	-21.61206	101.55845	A1	33	0.00000
328	34	VAL	N	-48.74537	-19.50449	102.33695	A1	34	0.00000
329	34	VAL	H	-49.19429	-18.80802	102.90183	A1	34	0.00000
330	34	VAL	CA	-47.51776	-19.11490	101.64269	A1	34	0.00000
331	34	VAL	CB	-47.81303	-18.42567	100.28392	A1	34	0.00000
332	34	VAL	CG1	-46.56686	-18.41158	99.39158	A1	34	0.00000
333	34	VAL	CG2	-48.95871	-19.06363	99.49806	A1	34	0.00000
334	34	VAL	C	-46.79652	-18.14692	102.56509	A1	34	0.00000
335	34	VAL	O	-47.41849	-17.54298	103.42874	A1	34	0.00000
336	35	ASP	N	-45.47963	-18.03426	102.37666	A1	35	0.00000
337	35	ASP	H	-45.03039	-18.68906	101.76710	A1	35	0.00000
338	35	ASP	CA	-44.68799	-16.93300	102.93355	A1	35	0.00000
339	35	ASP	CB	-44.74876	-15.73492	101.94639	A1	35	0.00000
340	35	ASP	CG	-46.11850	-15.06364	101.88569	A1	35	0.00000
341	35	ASP	OD1	-46.85196	-15.31279	100.93528	A1	35	0.00000
342	35	ASP	CD2	-46.43780	-14.28565	102.78747	A1	35	0.00000
343	35	ASP	C	-44.90949	-16.57120	104.41152	A1	35	0.00000
344	35	ASP	O	-45.03304	-17.43137	105.27733	A1	35	0.00000
345	36	MET	N	-44.91212	-15.26386	104.68945	A1	36	0.00000
346	36	MET	H	-44.97503	-14.56792	103.95356	A1	36	0.00000
347	36	MET	CA	-45.05621	-14.74244	106.04065	A1	36	0.00000
348	36	MET	CB	-44.58443	-13.28473	106.01845	A1	36	0.00000
349	36	MET	CG	-43.15122	-13.10955	105.50403	A1	36	0.00000
350	36	MET	SD	-42.96722	-11.71848	104.37016	A1	36	0.00000
351	36	MET	CE	-43.60204	-10.40582	105.42531	A1	36	0.00000
352	36	MET	C	-46.49207	-14.77022	106.53712	A1	36	0.00000
353	36	MET	O	-46.75425	-14.73983	107.73458	A1	36	0.00000
354	37	ALA	N	-47.43476	-14.70996	105.58618	A1	37	0.00000
355	37	ALA	H	-47.21869	-14.67225	104.60519	A1	37	0.00000
356	37	ALA	CA	-48.80100	-14.57493	106.05297	A1	37	0.00000
357	37	ALA	CB	-49.30059	-13.19637	105.61316	A1	37	0.00000
358	37	ALA	C	-49.83252	-15.61256	105.65673	A1	37	0.00000
359	37	ALA	O	-49.85254	-16.18787	104.57639	A1	37	0.00000
360	38	LYS	N	-50.76933	-15.79391	106.59397	A1	38	0.00000
361	38	LYS	H	-50.65212	-15.37866	107.49351	A1	38	0.00000
362	38	LYS	CA	-52.00981	-16.48765	106.23832	A1	38	0.00000
363	38	LYS	CB	-52.90628	-16.55867	107.48306	A1	38	0.00000
364	38	LYS	CG	-52.41585	-17.40517	108.60236	A1	38	0.00000
365	38	LYS	CD	-53.40991	-18.62084	108.86903	A1	38	0.00000
366	38	LYS	CE	-53.42547	-19.66155	107.75111	A1	38	0.00000
367	38	LYS	NZ	-54.78503	-20.17861	107.56038	A1	38	0.00000
368	38	LYS	HZ1	-54.79226	-20.92377	106.83759	A1	38	0.00000
369	38	LYS	HZ2	-55.17879	-20.59510	108.44046	A1	38	0.00000
370	38	LYS	HZ3	-55.42747	-19.41621	107.27224	A1	38	0.00000
371	38	LYS	C	-52.74081	-15.73437	105.12989	A1	38	0.00000
372	38	LYS	O	-52.72521	-14.51209	105.10297	A1	38	0.00000
373	39	LYS	N	-53.35457	-16.44351	104.17702	A1	39	0.00000
374	39	LYS	H	-53.59774	-15.96113	103.33578	A1	39	0.00000
375	39	LYS	CA	-53.67982	-17.86931	104.22041	A1	39	0.00000
376	39	LYS	CB	-55.18971	-18.00306	104.55246	A1	39	0.00000
377	39	LYS	CG	-56.24681	-17.84030	103.42417	A1	39	0.00000
378	39	LYS	CD	-56.27039	-16.52550	102.62130	A1	39	0.00000
379	39	LYS	CE	-56.64532	-16.49151	101.13213	A1	39	0.00000
380	39	LYS	NZ	-55.66137	-17.54082	100.43822	A1	39	0.00000

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381	39	LYS	H21	-55.1	45	-18.54581	100.36313	A1	39	0.00000
382	39	LYS	H22	-55.1	53	-17.26725	99.46103	A1	39	0.00000
383	39	LYS	H23	-54.72486		-17.51921	100.90690	A1	39	0.00000
384	39	LYS	C	-53.44423		-18.44283	102.84433	A1	39	0.00000
385	39	LYS	O	-53.43351		-17.67518	101.88936	A1	39	0.00000
386	40	GLU	N	-53.41332		-19.77420	102.71885	A1	40	0.00000
387	40	GLU	H	-53.16154		-20.43691	103.42697	A1	40	0.00000
388	40	GLU	CA	-54.08892		-20.14645	101.48663	A1	40	0.00000
389	40	GLU	CB	-53.22132		-20.84643	100.44056	A1	40	0.00000
390	40	GLU	CG	-52.68203		-19.82757	99.41114	A1	40	0.00000
391	40	GLU	CD	-53.78227		-10.90107	98.89631	A1	40	0.00000
392	40	GLU	OE1	-53.60681		-17.68372	98.89245	A1	40	0.00000
393	40	GLU	OE2	-54.86246		-19.35560	98.59153	A1	40	0.00000
394	40	GLU	C	-55.46625		-20.74566	101.61501	A1	40	0.00000
395	40	GLU	O	-56.42031		-20.18304	101.08479	A1	40	0.00000
396	41	THR	N	-55.56321		-21.84976	102.35754	A1	41	0.00000
397	41	THR	H	-54.77319		-22.20472	102.86321	A1	41	0.00000
398	41	THR	CA	-56.84476		-22.55464	102.30963	A1	41	0.00000
399	41	THR	CB	-56.55011		-24.05030	102.16109	A1	41	0.00000
400	41	THR	OG1	-57.73042		-24.75407	101.74066	A1	41	0.00000
401	41	THR	HG1	-57.47835		-25.59614	101.33640	A1	41	0.00000
402	41	THR	CG2	-55.95304		-24.67173	103.43152	A1	41	0.00000
403	41	THR	C	-57.85722		-22.26510	103.42344	A1	41	0.00000
404	41	THR	O	-57.54677		-21.93546	104.56718	A1	41	0.00000
405	42	VAL	N	-59.12316		-22.41525	103.00455	A1	42	0.00000
406	42	VAL	H	-59.25687		-22.81422	102.09633	A1	42	0.00000
407	42	VAL	CA	-60.29134		-22.03291	103.80812	A1	42	0.00000
408	42	VAL	CB	-61.57611		-22.26646	102.98525	A1	42	0.00000
409	42	VAL	CG1	-62.83989		-21.83994	103.74041	A1	42	0.00000
410	42	VAL	CG2	-61.49852		-21.55078	101.63610	A1	42	0.00000
411	42	VAL	C	-60.39368		-22.75550	105.14170	A1	42	0.00000
412	42	VAL	O	-60.54018		-22.16641	106.20404	A1	42	0.00000
413	43	TRP	N	-60.26652		-24.07997	105.07466	A1	43	0.00000
414	43	TRP	H	-60.09540		-24.53437	104.20145	A1	43	0.00000
415	43	TRP	CA	-60.35178		-24.82113	106.34002	A1	43	0.00000
416	43	TRP	CB	-60.91225		-26.25321	106.17013	A1	43	0.00000
417	43	TRP	CG	-60.96314		-26.72686	104.73262	A1	43	0.00000
418	43	TRP	CD2	-59.88712		-27.12198	103.92127	A1	43	0.00000
419	43	TRP	CE2	-60.47947		-27.49629	102.60102	A1	43	0.00000
420	43	TRP	CE3	-58.50029		-27.24274	104.12574	A1	43	0.00000
421	43	TRP	CD1	-62.11826		-26.86040	103.93459	A1	43	0.00000
422	43	TRP	HE1	-61.84174		-27.31306	102.67766	A1	43	0.00000
423	43	TRP	HE1	-62.50030		-27.49046	101.97106	A1	43	0.00000
424	43	TRP	CZ2	-59.62565		-27.96652	101.58525	A1	43	0.00000
425	43	TRP	CZ3	-57.69263		-27.72260	103.07694	A1	43	0.00000
426	43	TRP	CH2	-58.24204		-28.07937	101.82597	A1	43	0.00000
427	43	TRP	C	-59.07150		-24.84373	107.16564	A1	43	0.00000
428	43	TRP	O	-58.85050		-25.68073	100.02836	A1	43	0.00000
429	44	ARG	N	-58.22471		-23.84563	106.89519	A1	44	0.00000
430	44	ARG	H	-58.31398		-23.27977	106.07364	A1	44	0.00000
431	44	ARG	CA	-57.22046		-23.49560	107.89144	A1	44	0.00000
432	44	ARG	CB	-55.83244		-23.69727	107.26013	A1	44	0.00000
433	44	ARG	CG	-54.63741		-23.63473	108.22026	A1	44	0.00000
434	44	ARG	CD	-53.30915		-23.64273	107.47006	A1	44	0.00000
435	44	ARG	HE	-52.10625		-23.26000	108.32672	A1	44	0.00000
436	44	ARG	HE	-52.36221		-22.91543	109.25139	A1	44	0.00000
437	44	ARG	CZ	-50.93149		-23.33650	107.86475	A1	44	0.00000
438	44	ARG	NH1	-49.92358		-22.86519	108.56844	A1	44	0.00000
439	44	ARG	NH11	-48.98076		-22.84912	108.24673	A1	44	0.00000
440	44	ARG	NH12	-50.05182		-22.52238	109.51721	A1	44	0.00000
441	44	ARG	NH2	-50.67215		-23.89024	106.69352	A1	44	0.00000
442	44	ARG	NH21	-49.73591		-23.96008	106.35139	A1	44	0.00000
443	44	ARG	NH22	-51.41769		-24.25918	106.14195	A1	44	0.00000
444	44	ARG	C	-57.42751		-22.85857	108.38029	A1	44	0.00000

FIG. 8

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445	44	ARC	O	-56.5	4	-21.39201	108.88943	A1	44	0.00000
446	45	LEU	N	-58.65470	-21.55686	108.18548	A1	45	0.00000	
447	45	LEU	H	-59.36846	-22.06382	107.69729	A1	45	0.00000	
448	45	LEU	CA	-58.94679	-20.21897	108.70611	A1	45	0.00000	
449	45	LEU	CB	-59.87267	-19.46515	107.74942	A1	45	0.00000	
450	45	LEU	CG	-59.15056	-18.96990	106.49579	A1	45	0.00000	
451	45	LEU	CD1	-60.14534	-18.41906	105.47407	A1	45	0.00000	
452	45	LEU	CD2	-58.10431	-17.92289	106.87944	A1	45	0.00000	
453	45	LEU	C	-59.55818	-20.20104	110.09168	A1	45	0.00000	
454	45	LEU	O	-59.53362	-19.19926	110.79199	A1	45	0.00000	
455	46	GLU	N	-60.08917	-21.36024	110.48954	A1	46	0.00000	
456	46	GLU	H	-60.14047	-22.14708	109.87631	A1	46	0.00000	
457	46	GLU	CA	-60.50379	-21.47317	111.86481	A1	46	0.00000	
458	46	GLU	CB	-61.47817	-22.71518	111.95437	A1	46	0.00000	
459	46	GLU	CG	-60.80881	-24.02305	111.51772	A1	46	0.00000	
460	46	GLU	CD	-61.85264	-25.11830	111.46594	A1	46	0.00000	
461	46	GLU	OE1	-62.26867	-25.47222	110.36424	A1	46	0.00000	
462	46	GLU	OE2	-62.24894	-25.60616	112.52280	A1	46	0.00000	
463	46	GLU	C	-59.48698	-21.49323	112.92683	A1	46	0.00000	
464	46	GLU	O	-59.60959	-21.22226	114.10493	A1	46	0.00000	
465	47	GLU	N	-58.27880	-21.79310	112.44220	A1	47	0.00000	
466	47	GLU	H	-58.18142	-22.06659	111.48920	A1	47	0.00000	
467	47	GLU	CA	-57.08155	-21.73864	113.27698	A1	47	0.00000	
468	47	GLU	CB	-55.89121	-22.09481	112.39059	A1	47	0.00000	
469	47	GLU	CG	-55.95036	-23.50661	111.78977	A1	47	0.00000	
470	47	GLU	CD	-55.55418	-24.58648	112.78701	A1	47	0.00000	
471	47	GLU	CE1	-55.48886	-25.74409	112.37878	A1	47	0.00000	
472	47	GLU	CE2	-55.29749	-24.27876	113.95212	A1	47	0.00000	
473	47	GLU	C	-56.83827	-20.38151	113.91510	A1	47	0.00000	
474	47	GLU	O	-56.67000	-19.35742	113.26194	A1	47	0.00000	
475	48	PHE	N	-56.83807	-20.40716	115.24713	A1	48	0.00000	
476	48	PHE	H	-56.92233	-21.28123	115.72305	A1	48	0.00000	
477	48	PHE	CA	-56.75617	-19.13647	115.96362	A1	48	0.00000	
478	48	PHE	CB	-57.20231	-19.34982	117.41420	A1	48	0.00000	
479	48	PHE	CG	-58.41697	-18.49841	117.70829	A1	48	0.00000	
480	48	PHE	CD1	-59.71122	-19.00320	117.44215	A1	48	0.00000	
481	48	PHE	CD2	-58.25459	-17.19966	118.24455	A1	48	0.00000	
482	48	PHE	CE1	-60.84630	-18.20670	117.71246	A1	48	0.00000	
483	48	PHE	CE2	-59.38940	-16.40286	118.51469	A1	48	0.00000	
484	48	PHE	CZ	-60.66202	-16.90878	118.24779	A1	48	0.00000	
485	48	PHE	C	-55.39240	-18.46628	115.93777	A1	48	0.00000	
486	48	PHE	O	-54.35117	-19.07618	115.72587	A1	48	0.00000	
487	49	GLY	N	-55.43214	-17.15361	116.19761	A1	49	0.00000	
488	49	GLY	H	-56.32069	-16.72101	116.34575	A1	49	0.00000	
489	49	GLY	CA	-54.23420	-16.30520	116.13162	A1	49	0.00000	
490	49	GLY	C	-52.92695	-16.86464	116.68056	A1	49	0.00000	
491	49	GLY	O	-51.85815	-16.69886	116.10714	A1	49	0.00000	
492	50	ARG	N	-53.03915	-17.56211	117.81779	A1	50	0.00000	
493	50	ARG	H	-53.93666	-17.67284	118.24069	A1	50	0.00000	
494	50	ARG	CA	-51.84656	-18.16800	118.42224	A1	50	0.00000	
495	50	ARG	CB	-52.27437	-18.92760	119.68340	A1	50	0.00000	
496	50	ARG	CG	-51.10260	-19.32736	120.58254	A1	50	0.00000	
497	50	ARG	CD	-51.53002	-20.14774	121.80047	A1	50	0.00000	
498	50	ARG	NE	-50.37432	-20.44943	122.64580	A1	50	0.00000	
499	50	ARG	HE	-49.69865	-19.71957	122.75767	A1	50	0.00000	
500	50	ARG	CZ	-50.24449	-21.63184	123.26571	A1	50	0.00000	
501	50	ARG	NH1	-49.16578	-21.04466	124.04503	A1	50	0.00000	
502	50	ARG	NH11	-49.05579	-22.71179	124.52612	A1	50	0.00000	
503	50	ARG	NH12	-48.49360	-21.13233	124.16453	A1	50	0.00000	
504	50	ARG	NH2	-51.15926	-22.58629	123.10823	A1	50	0.00000	
505	50	ARG	NH21	-51.08073	-23.47414	123.56513	A1	50	0.00000	
506	50	ARG	NH22	-51.95092	-22.42795	122.51852	A1	50	0.00000	
507	50	ARG	C	-51.06703	-19.09581	117.49074	A1	50	0.00000	
508	50	ARG	O	-49.84240	-19.09133	117.41826	A1	50	0.00000	

FIG. 9

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509	51	PHE	N	-51.84	-19.87778	116.73839	A1	51	0.00000
510	51	PHE	H	-52.84564	-19.76657	116.76797	A1	51	0.00000
511	51	PHE	CA	-51.29477	-20.78796	115.73402	A1	51	0.00000
512	51	PHE	CB	-52.51672	-21.52503	115.15449	A1	51	0.00000
513	51	PHE	CG	-52.25099	-22.49194	114.02359	A1	51	0.00000
514	51	PHE	CD1	-51.87888	-23.82851	114.29503	A1	51	0.00000
515	51	PHE	CD2	-52.45788	-22.06484	112.69289	A1	51	0.00000
516	51	PHE	CE1	-51.72483	-24.74421	113.22969	A1	51	0.00000
517	51	PHE	CE2	-52.30778	-22.98082	111.63059	A1	51	0.00000
518	51	PHE	CZ	-51.94314	-24.31860	111.90000	A1	51	0.00000
519	51	PHE	C	-50.50268	-20.00696	114.69371	A1	51	0.00000
520	51	PHE	O	-49.31281	-20.20801	114.47961	A1	51	0.00000
521	52	ALA	N	-51.20469	-19.03212	114.10202	A1	52	0.00000
522	52	ALA	H	-52.16823	-18.89764	114.33870	A1	52	0.00000
523	52	ALA	CA	-50.54896	-18.16486	113.11957	A1	52	0.00000
524	52	ALA	CB	-51.52058	-17.09216	112.62511	A1	52	0.00000
525	52	ALA	C	-49.28257	-17.48933	113.62687	A1	52	0.00000
526	52	ALA	O	-48.27008	-17.39834	112.94510	A1	52	0.00000
527	53	SER	N	-49.35763	-17.04955	114.88764	A1	53	0.00000
528	53	SER	H	-50.22411	-17.11498	115.38567	A1	53	0.00000
529	53	SER	CA	-48.18100	-16.47055	115.53815	A1	53	0.00000
530	53	SER	CB	-48.58146	-16.02158	116.95383	A1	53	0.00000
531	53	SER	OG	-47.59593	-15.15541	117.52845	A1	53	0.00000
532	53	SER	HG	-47.05158	-14.90357	118.42105	A1	53	0.00000
533	53	SER	C	-46.99433	-17.42737	115.57426	A1	53	0.00000
534	53	SER	O	-45.89463	-17.11790	115.12568	A1	53	0.00000
535	54	PHE	N	-47.26082	-18.64220	116.08200	A1	54	0.00000
536	54	PHE	H	-40.18040	-18.87361	116.41568	A1	54	0.00000
537	54	PHE	CA	-46.18727	-19.64350	116.09999	A1	54	0.00000
538	54	PHE	CB	-46.69548	-20.99079	116.63413	A1	54	0.00000
539	54	PHE	CG	-46.90625	-20.99411	118.13255	A1	54	0.00000
540	54	PHE	CD1	-48.11656	-21.50316	118.65539	A1	54	0.00000
541	54	PHE	CD2	-45.89246	-20.53119	119.00621	A1	54	0.00000
542	54	PHE	CE1	-48.31310	-21.55376	120.05266	A1	54	0.00000
543	54	PHE	CE2	-46.08593	-20.57973	120.40382	A1	54	0.00000
544	54	PHE	CZ	-42.30008	-21.09192	120.92307	A1	54	0.00000
545	54	PHE	C	-45.57270	-19.90650	114.73758	A1	54	0.00000
546	54	PHE	O	-44.36030	-19.93109	114.55246	A1	54	0.00000
547	55	GLU	N	-46.46681	-20.08976	113.76558	A1	55	0.00000
548	55	GLU	H	-47.45338	-20.04226	113.95516	A1	55	0.00000
549	55	GLU	CA	-45.97322	-20.41545	112.42886	A1	55	0.00000
550	55	GLU	CB	-47.14512	-20.81915	111.54876	A1	55	0.00000
551	55	GLU	CG	-47.92567	-21.96126	112.19274	A1	55	0.00000
552	55	GLU	CD	-49.04456	-22.36202	111.27677	A1	55	0.00000
553	55	GLU	OE1	-49.15553	-23.53977	110.96047	A1	55	0.00000
554	55	GLU	OE2	-49.80524	-21.50984	110.81474	A1	55	0.00000
555	55	GLU	C	-45.19354	-19.30188	111.76318	A1	55	0.00000
556	55	GLU	O	-44.12678	-19.50387	111.19343	A1	55	0.00000
557	56	ALA	N	-45.73650	-18.08673	111.89532	A1	56	0.00000
558	56	ALA	H	-46.62336	-17.96765	112.34890	A1	56	0.00000
559	56	ALA	CA	-45.00414	-16.92733	111.38640	A1	56	0.00000
560	56	ALA	CB	-45.80074	-15.63871	111.59969	A1	56	0.00000
561	56	ALA	C	-43.63772	-16.77849	112.02791	A1	56	0.00000
562	56	ALA	O	-42.62065	-16.60634	111.36878	A1	56	0.00000
563	57	GLN	N	-43.63088	-16.91454	113.35929	A1	57	0.00000
564	57	GLN	H	-44.46826	-17.03983	113.86832	A1	57	0.00000
565	57	GLN	CA	-42.35063	-16.88200	114.06847	A1	57	0.00000
566	57	GLN	CB	-42.61967	-17.03049	115.56930	A1	57	0.00000
567	57	GLN	CG	-41.40659	-16.75355	116.45895	A1	57	0.00000
568	57	GLN	CD	-41.80070	-16.94529	117.90800	A1	57	0.00000
569	57	GLN	OE1	-42.29879	-16.06206	118.58910	A1	57	0.00000
570	57	GLN	OE2	-41.55425	-18.16011	116.38366	A1	57	0.00000
571	57	GLN	HE21	-41.14709	-18.27176	117.81428	A1	57	0.00000
572	57	GLN	HE22	-41.78115	-18.35728	119.33313	A1	57	0.00000

FIG. 10

573	57	GLN	C	-41.13	-17.94055	113.59025	A1	57	0.00000
574	57	GLN	O	-40.18571	-17.68051	113.34773	A1	57	0.00000
575	58	GLY	N	-41.88825	-19.15742	113.41319	A1	58	0.00000
576	58	GLY	H	-42.84771	-19.33514	113.64847	A1	58	0.00000
577	58	GLY	CA	-41.05379	-20.23393	112.87374	A1	58	0.00000
578	58	GLY	C	-40.45534	-19.92781	111.50957	A1	58	0.00000
579	58	GLY	O	-39.25324	-20.01021	111.27849	A1	58	0.00000
580	59	ALA	N	-41.34654	-19.52227	110.60018	A1	59	0.00000
581	59	ALA	H	-42.32072	-19.46762	110.83485	A1	59	0.00000
582	59	ALA	CA	-40.88666	-19.14537	109.26181	A1	59	0.00000
583	59	ALA	CB	-42.07124	-18.74086	108.30101	A1	59	0.00000
584	59	ALA	C	-39.86090	-18.02257	109.26073	A1	59	0.00000
585	59	ALA	O	-38.85187	-18.04905	108.56603	A1	59	0.00000
586	60	LEU	N	-40.12979	-17.02925	110.11113	A1	60	0.00000
587	60	LEU	H	-40.96678	-17.03715	110.66448	A1	60	0.00000
588	60	LEU	CA	-39.17026	-15.93079	110.21454	A1	60	0.00000
589	60	LEU	CB	-39.62974	-14.72108	110.88234	A1	60	0.00000
590	60	LEU	CG	-41.00342	-14.16448	110.06267	A1	60	0.00000
591	60	LEU	CD1	-41.72077	-13.05637	110.83175	A1	60	0.00000
592	60	LEU	CD2	-40.54968	-13.69403	108.67852	A1	60	0.00000
593	60	LEU	C	-37.86300	-16.28607	110.90549	A1	60	0.00000
594	60	LEU	O	-36.81366	-15.71151	110.64266	A1	60	0.00000
595	61	ALA	N	-37.92548	-17.30628	111.76650	A1	61	0.00000
596	61	ALA	H	-38.80416	-17.70206	112.04737	A1	61	0.00000
597	61	ALA	CA	-36.66060	-17.86080	112.25036	A1	61	0.00000
598	61	ALA	CB	-36.90091	-18.87147	113.37402	A1	61	0.00000
599	61	ALA	C	-35.86652	-18.52303	111.13575	A1	61	0.00000
600	61	ALA	O	-34.67753	-18.28483	110.93578	A1	61	0.00000
601	62	ASN	N	-36.59182	-19.33011	110.35468	A1	62	0.00000
602	62	ASN	H	-37.55651	-19.52444	110.56450	A1	62	0.00000
603	62	ASN	CA	-35.93048	-19.97053	109.20954	A1	62	0.00000
604	62	ASN	CB	-36.90608	-20.83397	108.41185	A1	62	0.00000
605	62	ASN	CG	-36.14296	-21.97501	107.76767	A1	62	0.00000
606	62	ASN	OD1	-35.90083	-23.00051	108.38915	A1	62	0.00000
607	62	ASN	ND2	-35.81296	-21.80385	106.49294	A1	62	0.00000
608	62	ASN	HD21	-35.71613	-20.90910	106.04169	A1	62	0.00000
609	62	ASN	HD22	-35.64736	-22.62041	105.92778	A1	62	0.00000
610	62	ASN	C	-35.27272	-18.97317	108.27635	A1	62	0.00000
611	62	ASN	O	-34.08577	-19.05772	107.98073	A1	62	0.00000
612	63	ILE	N	-36.07385	-17.96130	107.91224	A1	63	0.00000
613	63	ILE	H	-37.03805	-17.97906	108.18770	A1	63	0.00000
614	63	ILE	CA	-35.60960	-16.86395	107.05550	A1	63	0.00000
615	63	ILE	CB	-36.79680	-15.88630	106.84927	A1	63	0.00000
616	63	ILE	CG2	-36.71800	-14.58751	107.66300	A1	63	0.00000
617	63	ILE	CG1	-37.00443	-15.60068	105.36486	A1	63	0.00000
618	63	ILE	CD	-38.27181	-14.79756	105.06416	A1	63	0.00000
619	63	ILE	C	-34.32421	-16.14412	107.48562	A1	63	0.00000
620	63	ILE	O	-33.67028	-15.43835	106.72047	A1	63	0.00000
621	64	ALA	N	-33.97867	-16.34078	108.76481	A1	64	0.00000
622	64	ALA	H	-34.55914	-16.88095	109.37800	A1	64	0.00000
623	64	ALA	CA	-32.68252	-15.86370	109.23001	A1	64	0.00000
624	64	ALA	CB	-32.78414	-15.37252	110.67448	A1	64	0.00000
625	64	ALA	C	-31.55324	-16.91956	109.13883	A1	64	0.00000
626	64	ALA	O	-30.45701	-16.65389	108.75412	A1	64	0.00000
627	65	VAL	N	-31.96250	-18.15367	109.50633	A1	65	0.00000
628	65	VAL	H	-32.92093	-18.37377	109.71401	A1	65	0.00000
629	65	VAL	CA	-30.91507	-19.17596	109.47932	A1	65	0.00000
630	65	VAL	CB	-31.28412	-20.41152	110.33210	A1	65	0.00000
631	65	VAL	CG1	-31.53866	-19.97521	111.77524	A1	65	0.00000
632	65	VAL	CG2	-32.45603	-21.23819	109.79675	A1	65	0.00000
633	65	VAL	C	-30.45713	-19.56758	108.08237	A1	65	0.00000
634	65	VAL	O	-29.26568	-19.71596	107.82437	A1	65	0.00000
635	66	ASP	N	-31.42136	-19.66037	107.15805	A1	66	0.00000
636	66	ASP	H	-32.38553	-19.45723	107.38932	A1	66	0.00000

FIG. 11

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637	66	ASP	CA	-31.0	-19.93216	105.76795	A1	66	0.00000
638	66	ASP	CB	-32.31036	-20.24966	104.93007	A1	66	0.00000
639	66	ASP	CG	-33.44297	-19.24219	105.08208	A1	66	0.00000
640	66	ASP	D1	-33.16986	-18.05114	105.20729	A1	66	0.00000
641	66	ASP	OD2	-34.60286	-19.65468	105.08126	A1	66	0.00000
642	66	ASP	C	-30.18178	-18.83449	103.15564	A1	66	0.00000
643	66	ASP	O	-29.16482	-19.06872	104.50705	A1	66	0.00000
644	67	LYS	N	-30.56424	-17.59916	105.48017	A1	67	0.00000
645	67	LYS	H	-31.49538	-17.48655	105.84055	A1	67	0.00000
646	67	LYS	CA	-29.72959	-16.43204	105.19320	A1	67	0.00000
647	67	LYS	CB	-30.39071	-15.23196	105.87104	A1	67	0.00000
648	67	LYS	CG	-29.79159	-13.86177	105.56853	A1	67	0.00000
649	67	LYS	CD	-30.51506	-12.79056	106.38164	A1	67	0.00000
650	67	LYS	CE	-29.96446	-11.38645	106.14720	A1	67	0.00000
651	67	LYS	NZ	-30.60526	-10.44891	107.01869	A1	67	0.00000
652	67	LYS	HZ1	-30.33262	-9.48398	106.85909	A1	67	0.00000
653	67	LYS	HZ2	-31.70143	-10.49161	106.80064	A1	67	0.00000
654	67	LYS	HZ3	-30.53221	-10.71804	108.01156	A1	67	0.00000
655	67	LYS	C	-20.28117	-16.58093	105.64383	A1	67	0.00000
656	67	LYS	O	-27.33559	-16.44078	104.87661	A1	67	0.00000
657	68	ALA	N	-28.12520	-16.92373	106.92795	A1	68	0.00000
658	68	ALA	H	-28.92119	-17.00935	107.53692	A1	68	0.00000
659	68	ALA	CA	-26.76352	-17.18143	107.40958	A1	68	0.00000
660	68	ALA	CB	-26.77377	-17.46846	108.91534	A1	68	0.00000
661	68	ALA	C	-26.07149	-18.34364	106.70618	A1	68	0.00000
662	68	ALA	O	-24.80989	-18.33297	106.37143	A1	68	0.00000
663	69	ASN	N	-26.87877	-19.37475	106.44973	A1	69	0.00000
664	69	ASN	H	-27.84416	-19.34421	106.72158	A1	69	0.00000
665	69	ASN	CA	-26.32826	-20.54731	105.77098	A1	69	0.00000
666	69	ASN	CB	-27.33794	-21.70567	105.74618	A1	69	0.00000
667	69	ASN	CG	-27.75534	-22.20215	107.12937	A1	69	0.00000
668	69	ASN	OD1	-28.81753	-22.77967	107.30600	A1	69	0.00000
669	69	ASN	ND2	-26.90880	-21.98927	108.13718	A1	69	0.00000
670	69	ASN	HD21	-26.02949	-21.53117	108.03476	A1	69	0.00000
671	69	ASN	HD22	-27.17968	-22.29754	109.04652	A1	69	0.00000
672	69	ASN	C	-25.83413	-20.26827	104.36379	A1	69	0.00000
673	69	ASN	O	-24.88019	-20.87816	103.89106	A1	69	0.00000
674	70	LEU	N	-26.46696	-19.27268	103.71664	A1	70	0.00000
675	70	LEU	H	-27.27121	-18.83110	104.12686	A1	70	0.00000
676	70	LEU	CA	-25.93555	-18.80513	102.42930	A1	70	0.00000
677	70	LEU	CB	-26.70466	-17.57714	101.93156	A1	70	0.00000
678	70	LEU	CG	-28.07464	-17.87907	101.32608	A1	70	0.00000
679	70	LEU	CD1	-28.90878	-16.60756	101.23109	A1	70	0.00000
680	70	LEU	CD2	-27.93286	-18.56192	99.96378	A1	70	0.00000
681	70	LEU	C	-24.47328	-18.42736	102.51389	A1	70	0.00000
682	70	LEU	O	-23.64160	-18.86456	101.72791	A1	70	0.00000
683	71	GLU	N	-24.17065	-17.62592	103.54240	A1	71	0.00000
684	71	GLU	H	-24.87529	-17.33320	104.19342	A1	71	0.00000
685	71	GLU	CA	-22.77384	-17.24207	103.73624	A1	71	0.00000
686	71	GLU	CB	-22.68099	-16.23884	104.88750	A1	71	0.00000
687	71	GLU	CG	-21.33647	-15.50613	104.93364	A1	71	0.00000
688	71	GLU	CD	-21.30052	-14.53829	106.10023	A1	71	0.00000
689	71	GLU	OE1	-20.27115	-14.47665	106.76570	A1	71	0.00000
690	71	GLU	OE2	-22.29376	-13.85012	106.33423	A1	71	0.00000
691	71	GLU	C	-21.86369	-18.43808	103.97868	A1	71	0.00000
692	71	GLU	O	-20.81243	-18.61050	103.36820	A1	71	0.00000
693	72	ILE	N	-22.34609	-19.31836	104.86364	A1	72	0.00000
694	72	ILE	H	-23.21301	-19.12129	105.33200	A1	72	0.00000
695	72	ILE	CA	-21.56703	-20.53142	105.13649	A1	72	0.00000
696	72	ILE	CB	-22.29516	-21.40405	106.17923	A1	72	0.00000
697	72	ILE	CG2	-21.51796	-22.60646	106.50604	A1	72	0.00000
698	72	ILE	CG1	-22.55172	-20.55465	107.45409	A1	72	0.00000
699	72	ILE	CD	-23.34520	-21.36378	108.51180	A1	72	0.00000
700	72	ILE	C	-21.22106	-21.35113	103.89490	A1	72	0.00000

FIG. 12

701	72	ILE	O	-20.79	-21.68162	103.64178	A1	72	0.00000
702	73	MET	N	-22.2.406	-21.67127	103.09738	A1	73	0.00000
703	73	MET	H	-23.17806	-21.34412	103.27303	A1	73	0.00000
704	73	MET	CA	-21.88577	-22.51146	101.95532	A1	73	0.00000
705	73	MET	CB	-23.02917	-23.44601	101.56487	A1	73	0.00000
706	73	MET	CG	-23.30745	-24.44882	102.69030	A1	73	0.00000
707	73	MET	SD	-24.39480	-25.79652	102.19686	A1	73	0.00000
708	73	MET	CE	-24.58745	-26.56731	103.81212	A1	73	0.00000
709	73	MET	C	-21.30840	-21.79430	100.75010	A1	73	0.00000
710	73	MET	O	-20.54740	-22.36938	99.97894	A1	73	0.00000
711	74	THR	N	-21.60342	-20.49214	100.63510	A1	74	0.00000
712	74	THR	H	-22.28955	-20.04403	101.21510	A1	74	0.00000
713	74	THR	CA	-20.82593	-19.73833	99.64704	A1	74	0.00000
714	74	THR	CB	-21.46299	-18.35496	99.36040	A1	74	0.00000
715	74	THR	OG1	-21.01301	-17.84761	98.09669	A1	74	0.00000
716	74	THR	HG1	-20.04699	-17.88381	98.02785	A1	74	0.00000
717	74	THR	CG2	-21.20740	-17.31089	100.44667	A1	74	0.00000
718	74	THR	C	-19.35170	-19.61359	100.02467	A1	74	0.00000
719	74	THR	O	-18.48554	-19.49348	99.16750	A1	74	0.00000
720	75	LYS	N	-19.08538	-19.69260	101.33717	A1	75	0.00000
721	75	LYS	H	-19.81675	-19.65220	102.02321	A1	75	0.00000
722	75	LYS	CA	-17.69833	-19.83955	101.77078	A1	75	0.00000
723	75	LYS	CB	-17.61408	-19.57287	103.27797	A1	75	0.00000
724	75	LYS	CG	-16.20208	-19.66153	103.86107	A1	75	0.00000
725	75	LYS	CD	-16.21091	-19.57437	105.38567	A1	75	0.00000
726	75	LYS	CE	-14.81504	-19.74395	105.98417	A1	75	0.00000
727	75	LYS	N2	-14.91179	-19.69891	107.44939	A1	75	0.00000
728	75	LYS	H21	-13.96620	-19.83508	107.86470	A1	75	0.00000
729	75	LYS	H22	-15.29159	-18.77551	107.74094	A1	75	0.00000
730	75	LYS	H23	-15.54844	-20.45311	107.77639	A1	75	0.00000
731	75	LYS	C	-17.14118	-21.21778	101.45102	A1	75	0.00000
732	75	LYS	O	-16.11623	-21.36022	100.79660	A1	75	0.00000
733	76	ARG	N	-17.86151	-22.25466	101.90990	A1	76	0.00000
734	76	ARG	H	-18.69512	-22.09296	102.44436	A1	76	0.00000
735	76	ARG	CA	-17.35520	-23.61422	101.67525	A1	76	0.00000
736	76	ARG	CB	-18.33654	-24.60494	102.17145	A1	76	0.00000
737	76	ARG	CG	-18.82789	-24.66219	103.62361	A1	76	0.00000
738	76	ARG	CD	-19.55383	-25.98411	103.91795	A1	76	0.00000
739	76	ARG	NE	-20.36155	-25.99642	105.14334	A1	76	0.00000
740	76	ARG	HE	-21.34527	-25.85364	105.02467	A1	76	0.00000
741	76	ARG	CZ	-19.85069	-26.28686	106.34915	A1	76	0.00000
742	76	ARG	NH1	-20.67426	-26.45770	107.38550	A1	76	0.00000
743	76	ARG	NH11	-20.32038	-26.64144	108.30551	A1	76	0.00000
744	76	ARG	NH12	-21.67206	-26.42100	107.26619	A1	76	0.00000
745	76	ARG	NH2	-18.53304	-26.41209	106.51158	A1	76	0.00000
746	76	ARG	NH21	-18.12377	-26.62371	107.39854	A1	76	0.00000
747	76	ARG	NH22	-17.92942	-26.29542	105.72237	A1	76	0.00000
748	76	ARG	C	-17.06072	-23.91761	100.20901	A1	76	0.00000
749	76	ARG	O	-16.02715	-24.45819	99.83552	A1	76	0.00000
750	77	SER	N	-18.01091	-23.50462	99.36716	A1	77	0.00000
751	77	SER	H	-18.84286	-23.05363	99.69917	A1	77	0.00000
752	77	SER	CA	-17.80506	-23.71642	97.95702	A1	77	0.00000
753	77	SER	CB	-19.13837	-24.15898	97.32351	A1	77	0.00000
754	77	SER	OG	-18.92403	-25.08061	96.24728	A1	77	0.00000
755	77	SER	HG	-18.99574	-24.62840	95.39572	A1	77	0.00000
756	77	SER	C	-17.22854	-22.51234	97.20137	A1	77	0.00000
757	77	SER	O	-17.39865	-22.33993	96.00106	A1	77	0.00000
758	78	ASN	N	-16.52714	-21.66944	97.97646	A1	78	0.00000
759	78	ASN	H	-16.44843	-21.84082	98.96113	A1	78	0.00000
760	78	ASN	CA	-15.74721	-20.53857	97.45264	A1	78	0.00000
761	78	ASN	CB	-14.33390	-21.01377	97.09195	A1	78	0.00000
762	78	ASN	CG	-13.52905	-21.21984	98.36114	A1	78	0.00000
763	78	ASN	CD1	-12.89956	-20.31632	98.85264	A1	78	0.00000
764	78	ASN	ND2	-13.55264	-22.45457	98.85326	A1	78	0.00000

765	78	ASN	HD21	-14.0	2	-23.19170	98.43678	A1	78	0.000000
766	78	ASN	HD22	-13.0	1	-22.65362	99.68493	A1	78	0.000000
767	78	ASN	C	-16.34134		-19.72172	96.31352	A1	78	0.000000
768	78	ASN	O	-15.71478		-19.42979	95.30178	A1	78	0.000000
769	79	TYR	N	-17.59612		-19.32597	96.52354	A1	79	0.000000
770	79	TYR	H	-18.05424		-19.55771	97.38252	A1	79	0.000000
771	79	TYR	CA	-18.21408		-18.48918	95.49858	A1	79	0.000000
772	79	TYR	CB	-19.64874		-18.92649	95.21260	A1	79	0.000000
773	79	TYR	CG	-19.74485		-20.32764	94.65360	A1	79	0.000000
774	79	TYR	CD1	-20.64246		-21.23278	95.25950	A1	79	0.000000
775	79	TYR	CE1	-20.76017		-22.54189	94.75217	A1	79	0.000000
776	79	TYR	CD2	-18.96361		-20.72112	93.54108	A1	79	0.000000
777	79	TYR	CE2	-19.07884		-22.03339	93.03642	A1	79	0.000000
778	79	TYR	CZ	-19.97533		-22.93822	93.64752	A1	79	0.000000
779	79	TYR	OH	-20.07585		-24.23438	93.18578	A1	79	0.000000
780	79	TYR	HH	-19.67682		-24.30670	92.31232	A1	79	0.000000
781	79	TYR	C	-18.21035		-17.01261	95.83719	A1	79	0.000000
782	79	TYR	O	-18.85099		-16.51273	96.76683	A1	79	0.000000
783	80	THR	N	-17.42457		-16.33235	95.00452	A1	80	0.000000
784	80	THR	H	-16.96429		-16.79509	94.24288	A1	80	0.000000
785	80	THR	CA	-17.09577		-14.92660	95.20513	A1	80	0.000000
786	80	THR	CB	-15.89072		-14.87711	96.18098	A1	80	0.000000
787	80	THR	OG1	-15.49849		-13.52440	96.43537	A1	80	0.000000
788	80	THR	HG1	-14.60960		-13.50159	96.80560	A1	80	0.000000
789	80	THR	CG2	-14.69719		-15.72265	95.72104	A1	80	0.000000
790	80	THR	C	-16.77512		-14.32258	93.03840	A1	80	0.000000
791	80	THR	O	-16.16679		-14.97644	92.99811	A1	80	0.000000
792	81	PRO	N	-17.23243		-13.08096	93.61451	A1	81	0.000000
793	81	PRO	CD	-10.04687		-12.25452	94.50529	A1	81	0.000000
794	81	PRO	CA	-16.95963		-12.43774	92.32255	A1	81	0.000000
795	81	PRO	CB	-18.08102		-11.39225	92.28996	A1	81	0.000000
796	81	PRO	CG	-18.22970		-10.94901	93.74456	A1	81	0.000000
797	81	PRO	C	-15.57247		-11.80328	92.25040	A1	81	0.000000
798	81	PRO	D	-15.41926		-10.58936	92.16776	A1	81	0.000000
799	82	ILE	N	-14.55883		-12.66988	92.27154	A1	82	0.000000
800	82	ILE	H	-14.69364		-13.66392	92.31920	A1	82	0.000000
801	82	ILE	CA	-13.18946		-12.18130	92.13921	A1	82	0.000000
802	82	ILE	CB	-12.60010		-11.87598	93.53959	A1	82	0.000000
803	82	ILE	CG2	-12.41140		-13.13773	94.38674	A1	82	0.000000
804	82	ILE	CG1	-11.31152		-11.05228	93.44331	A1	82	0.000000
805	82	ILE	CD	-10.76554		-10.62709	94.80896	A1	82	0.000000
806	82	ILE	C	-12.35649		-13.19907	91.37376	A1	82	0.000000
807	82	ILE	OCT1	-11.36717		-12.81747	90.75062	A1	82	0.000000
808	82	ILE	OCT2	-12.72556		-14.37446	91.38671	A1	82	0.000000
809	83	GLY	N	-17.53322		-0.31236	94.99084	B1	1	0.000000
810	83	GLY	HT1	-17.21994		0.44323	94.35235	B1	1	0.000000
811	83	GLY	HT2	-16.86357		-1.12219	94.96444	B1	1	0.000000
812	83	GLY	HT3	-17.61098		0.01920	95.97150	B1	1	0.000000
813	83	GLY	CA	-18.79853		-0.91116	94.55151	B1	1	0.000000
814	83	GLY	C	-18.52573		-2.38203	94.66351	B1	1	0.000000
815	83	GLY	O	-17.35786		-2.70920	94.84086	B1	1	0.000000
816	84	ASP	N	-19.57260		-3.20239	94.59303	B1	2	0.000000
817	84	ASP	H	-20.49658		-2.89510	94.35600	B1	2	0.000000
818	84	ASP	CA	-19.43900		-4.63200	94.86181	B1	2	0.000000
819	84	ASP	CB	-19.44643		-4.83356	96.38475	B1	2	0.000000
820	84	ASP	CG	-18.89301		-6.19619	96.73815	B1	2	0.000000
821	84	ASP	OD1	-17.69451		-6.29764	96.98109	B1	2	0.000000
822	84	ASP	OD2	-19.66566		-7.14958	96.75715	B1	2	0.000000
823	84	ASP	C	-20.62786		-5.31072	94.19848	B1	2	0.000000
824	84	ASP	O	-21.46903		-4.61697	93.63479	B1	2	0.000000
825	85	THR	N	-20.67796		-6.64606	94.24891	B1	3	0.000000
826	85	THR	H	-20.04362		-7.15926	94.84032	B1	3	0.000000
827	85	THR	CA	-21.75257		-7.39367	93.59154	B1	3	0.000000
828	85	THR	CB	-21.58903		-7.31940	92.05122	B1	3	0.000000

FIG. 14

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829	85	THR	OG1	-22.165	-7.82400	91.39964	B1	3	0.00000
830	85	THR	HG1	-22.73431	-7.60152	90.46343	B1	3	0.00000
831	85	THR	CG2	-20.32966	-8.02078	91.53071	B1	3	0.00000
832	85	THR	C	-21.74290	-8.83241	94.09035	B1	3	0.00000
833	85	THR	O	-20.76454	-9.30377	94.65381	B1	3	0.00000
834	86	ARG	N	-22.86491	-9.52779	93.88799	B1	4	0.00000
835	86	ARG	H	-23.62404	-9.13760	93.36423	B1	4	0.00000
836	86	ARG	CA	-22.93360	-10.87552	94.44830	B1	4	0.00000
837	86	ARG	CB	-23.51668	-10.79083	95.86916	B1	4	0.00000
838	86	ARG	CG	-22.74323	-11.65365	96.87092	B1	4	0.00000
839	86	ARG	CD	-23.23116	-13.10294	97.02541	B1	4	0.00000
840	86	ARG	NE	-22.12580	-14.03911	97.27083	B1	4	0.00000
841	86	ARG	HE	-21.93083	-14.68836	96.53494	B1	4	0.00000
842	86	ARG	CZ	-21.37502	-14.05016	98.38612	B1	4	0.00000
843	86	ARG	NH1	-20.31371	-14.85617	98.44757	B1	4	0.00000
844	86	ARG	NH11	-19.73815	-14.87872	99.26299	B1	4	0.00000
845	86	ARG	NH12	-20.05194	-15.47498	97.69021	B1	4	0.00000
846	86	ARG	NH2	-21.67517	-13.26636	99.42563	B1	4	0.00000
847	86	ARG	NH21	-21.13780	-13.26659	100.26897	B1	4	0.00000
848	86	ARG	NH22	-22.46145	-12.65025	99.36831	B1	4	0.00000
849	86	ARG	C	-23.73522	-11.82065	93.57905	B1	4	0.00000
850	86	ARG	O	-24.85200	-11.52803	93.17882	B1	4	0.00000
851	87	PRO	N	-23.12190	-12.98532	93.27325	B1	5	0.00000
852	87	PRO	CD	-21.73269	-13.34562	93.54376	B1	5	0.00000
853	87	PRO	CA	-23.84435	-14.02757	92.53087	B1	5	0.00000
854	87	PRO	CB	-22.76528	-15.13066	92.39999	B1	5	0.00000
855	87	PRO	CG	-21.43460	-14.43376	92.52460	B1	5	0.00000
856	87	PRO	C	-25.10390	-14.54496	93.21975	B1	5	0.00000
857	87	PRO	O	-25.32441	-14.39544	94.41838	B1	5	0.00000
858	88	ARG	N	-25.94344	-15.17061	92.39123	B1	6	0.00000
859	88	ARG	H	-25.68611	-15.35588	91.44433	B1	6	0.00000
860	88	ARG	CA	-27.23219	-15.62675	92.90235	B1	6	0.00000
861	88	ARG	CB	-28.29078	-15.39805	91.81653	B1	6	0.00000
862	88	ARG	CG	-29.70863	-15.55859	92.35844	B1	6	0.00000
863	88	ARG	CD	-30.79150	-14.91787	91.49236	B1	6	0.00000
864	88	ARG	NE	-31.92741	-14.57277	92.34607	B1	6	0.00000
865	88	ARG	HE	-31.76512	-14.64038	93.33788	B1	6	0.00000
866	88	ARG	CZ	-33.08881	-14.12165	91.86193	B1	6	0.00000
867	88	ARG	NH1	-34.06565	-13.81756	92.71322	B1	6	0.00000
868	88	ARG	NH11	-34.95441	-13.48197	92.40144	B1	6	0.00000
869	88	ARG	NH12	-33.91853	-13.92533	93.69838	B1	6	0.00000
870	88	ARG	NH2	-33.26623	-13.97383	90.54974	B1	6	0.00000
871	88	ARG	NH21	-34.12737	-13.64013	90.16725	B1	6	0.00000
872	88	ARG	NH22	-32.52080	-14.19859	89.92214	B1	6	0.00000
873	88	ARG	C	-27.23157	-17.07404	93.36366	B1	6	0.00000
874	88	ARG	O	-26.89591	-18.00090	92.63574	B1	6	0.00000
875	89	PHE	N	-27.62757	-17.24057	94.62546	B1	7	0.00000
876	89	PHE	H	-27.92346	-16.46797	95.18173	B1	7	0.00000
877	89	PHE	CA	-27.64368	-18.59443	95.17433	B1	7	0.00000
878	89	PHE	CB	-26.56379	-18.74887	96.25427	B1	7	0.00000
879	89	PHE	CG	-25.20774	-18.55805	95.61829	B1	7	0.00000
880	89	PHE	CD1	-24.74915	-19.48139	94.64858	B1	7	0.00000
881	89	PHE	CD2	-24.42840	-17.43023	95.96102	B1	7	0.00000
882	89	PHE	CE1	-23.51045	-19.27079	94.00961	B1	7	0.00000
883	89	PHE	CE2	-23.18767	-17.21576	95.32384	B1	7	0.00000
884	89	PHE	CZ	-22.73800	-18.13927	94.34976	B1	7	0.00000
885	89	PHE	C	-28.99632	-18.97147	95.72084	B1	7	0.00000
886	89	PHE	O	-29.85551	-18.12429	95.94786	B1	7	0.00000
887	90	LEU	N	-29.15750	-20.28822	95.87791	B1	8	0.00000
888	90	LEU	H	-26.38720	-20.92114	95.76376	B1	8	0.00000
889	90	LEU	CA	-30.48675	-20.02226	96.14113	B1	8	0.00000
890	90	LEU	CB	-31.01268	-21.46546	94.64961	B1	8	0.00000
891	90	LEU	CG	-32.46079	-21.16892	94.43614	B1	8	0.00000
892	90	LEU	CD1	-32.81113	-21.98230	93.19113	B1	8	0.00000

FIG. 15

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893	90	LEU	CD2	-33.4	8	-21.40699	95.55222	B1	8	0.00000
894	90	LEU	C	-30.45467		-21.90281	97.20252	B1	8	0.00000
895	90	LEU	O	-29.74216		-22.89200	97.07224	B1	8	0.00000
896	91	TRP	N	-31.28133		-21.71086	98.22982	B1	9	0.00000
897	91	TRP	H	-31.78897		-20.85226	98.31900	B1	9	0.00000
898	91	TRP	CA	-31.61477		-22.06043	99.06700	B1	9	0.00000
899	91	TRP	CB	-31.76159		-22.50789	100.54418	B1	9	0.00000
900	91	TRP	CG	-30.46050		-22.11490	101.18157	B1	9	0.00000
901	91	TRP	CD2	-29.22893		-22.79283	101.16170	B1	9	0.00000
902	91	TRP	CE2	-28.30074		-21.96546	101.98847	B1	9	0.00000
903	91	TRP	CE3	-28.77368		-24.00327	100.60389	B1	9	0.00000
904	91	TRP	CD1	-30.26500		-20.96427	101.96112	B1	9	0.00000
905	91	TRP	HE1	-28.99810		-20.87047	102.44030	B1	9	0.00000
906	91	TRP	HE1	-28.68566		-20.15616	103.04137	B1	9	0.00000
907	91	TRP	CZ2	-26.97767		-22.40520	102.16578	B1	9	0.00000
908	91	TRP	CZ3	-27.44054		-24.40402	100.81577	B1	9	0.00000
909	91	TRP	CH2	-26.56124		-23.61859	101.58828	B1	9	0.00000
910	91	TRP	C	-32.96765		-23.39534	98.70806	B1	9	0.00000
911	91	TRP	O	-33.92486		-22.66026	98.49798	B1	9	0.00000
912	92	GLN	N----	-33.02847		-24.71550	98.69197	B1	10	0.00000
913	92	GLN	H	-32.20362		-25.28365	98.76579	B1	10	0.00000
914	92	GLN	CA	-34.33516		-25.34751	98.65309	B1	10	0.00000
915	92	GLN	CB	-34.50105		-26.04119	97.30049	B1	10	0.00000
916	92	GLN	CG	-34.43287		-25.05724	96.13126	B1	10	0.00000
917	92	GLN	CD	-34.12668		-25.79390	94.84833	B1	10	0.00000
918	92	GLN	OE1	-32.99424		-25.68638	94.39010	B1	10	0.00000
919	92	GLN	NE2	-35.19268		-26.32196	94.25873	B1	10	0.00000
920	92	GLN	HE21	-36.10617		-26.21874	94.65013	B1	10	0.00000
921	92	GLN	HE22	-35.08609		-26.83019	93.40658	B1	10	0.00000
922	92	GLN	C	-34.37000		-26.35610	99.77327	B1	10	0.00000
923	92	GLN	O	-33.40619		-27.07419	100.00960	B1	10	0.00000
924	93	LEU	N	-35.49484		-26.39205	100.47380	B1	11	0.00000
925	93	LEU	H	-36.24432		-25.74963	100.29272	B1	11	0.00000
926	93	LEU	CA	-35.59559		-27.43909	101.48633	B1	11	0.00000
927	93	LEU	CB	-35.41178		-26.81504	102.88181	B1	11	0.00000
928	93	LEU	CG	-34.83577		-27.70766	103.99848	B1	11	0.00000
929	93	LEU	CD1	-34.33031		-26.83624	105.14843	B1	11	0.00000
930	93	LEU	CD2	-35.82812		-28.74167	104.52005	B1	11	0.00000
931	93	LEU	C	-36.93596		-28.11112	101.32695	B1	11	0.00000
932	93	LEU	O	-37.91692		-27.47571	100.96621	B1	11	0.00000
933	94	LYS	N	-36.95045		-29.41719	101.56549	B1	12	0.00000
934	94	LYS	H	-36.10205		-29.89066	101.79736	B1	12	0.00000
935	94	LYS	CA	-38.21063		-30.14121	101.49214	B1	12	0.00000
936	94	LYS	CB	-38.26049		-30.88530	100.13839	B1	12	0.00000
937	94	LYS	CG	-39.43761		-31.85442	100.07544	B1	12	0.00000
938	94	LYS	CD	-39.91969		-32.44832	98.75113	B1	12	0.00000
939	94	LYS	CE	-41.00198		-33.40442	99.23924	B1	12	0.00000
940	94	LYS	NZ	-41.98389		-33.90963	98.26846	B1	12	0.00000
941	94	LYS	HZ1	-42.69798		-34.41995	98.86351	B1	12	0.00000
942	94	LYS	HZ2	-42.49249		-33.14263	97.78947	B1	12	0.00000
943	94	LYS	HZ3	-41.57162		-34.57937	97.59540	B1	12	0.00000
944	94	LYS	C	-38.34910		-31.08699	102.67642	B1	12	0.00000
945	94	LYS	O	-37.54720		-31.99770	102.85849	B1	12	0.00000
946	95	PHE	N	-39.40676		-30.85529	103.46609	B1	13	0.00000
947	95	PHE	H	-39.99321		-30.05201	103.34519	B1	13	0.00000
948	95	PHE	CA	-39.73794		-31.84982	104.49053	B1	13	0.00000
949	95	PHE	CB	-39.13251		-31.49228	105.86481	B1	13	0.00000
950	95	PHE	CG	-39.62104		-30.20819	106.49960	B1	13	0.00000
951	95	PHE	CD1	-39.04917		-28.96886	106.12996	B1	13	0.00000
952	95	PHE	CD2	-40.60668		-30.26479	107.51173	B1	13	0.00000
953	95	PHE	CE1	-39.45587		-27.78326	106.77985	B1	13	0.00000
954	95	PHE	CE2	-41.01477		-29.08015	108.16313	B1	13	0.00000
955	95	PHE	CZ	-40.43557		-27.84435	107.79605	B1	13	0.00000
956	95	PHE	C	-41.22005		-32.16799	104.57423	B1	13	0.00000

FIG. 16

957	95	PHE	O	-42.0	-31.31332	104.41691	B1	13	0.00000
958	96	GLU	N	-41.47812	-33.46734	104.75822	B1	14	0.00000
959	96	GLU	H	-40.74093	-34.09071	105.01948	B1	14	0.00000
960	96	GLU	CA	-42.80002	-33.99059	104.40078	B1	14	0.00000
961	96	GLU	CB	-42.75085	-34.25375	102.88321	B1	14	0.00000
962	96	GLU	CG	-43.92070	-34.87965	102.11791	B1	14	0.00000
963	96	GLU	CD	-43.55505	-34.92496	100.64018	B1	14	0.00000
964	96	GLU	OE1	-44.08205	-34.15253	99.84297	B1	14	0.00000
965	96	GLU	OE2	-42.67962	-35.68559	100.23154	B1	14	0.00000
966	96	GLU	C	-43.13129	-35.25393	105.17925	B1	14	0.00000
967	96	GLU	O	-42.27510	-36.11395	105.37879	B1	14	0.00000
968	97	CYS	N	-44.39621	-35.34431	105.62501	B1	15	0.00000
969	97	CYS	H	-45.05281	-34.60566	105.44206	B1	15	0.00000
970	97	CYS	CA	-44.78990	-36.60747	106.25700	B1	15	0.00000
971	97	CYS	CB	-45.09404	-36.46870	107.76554	B1	15	0.00000
972	97	CYS	SG	-46.49873	-35.54248	108.42288	B1	15	0.00000
973	97	CYS	C	-45.89248	-37.36966	105.55706	B1	15	0.00000
974	97	CYS	O	-46.75253	-36.80546	104.88787	B1	15	0.00000
975	98	HIS	N	-45.80356	-38.69951	105.71784	B1	16	0.00000
976	98	HIS	H	-45.06854	-39.11332	106.26371	B1	16	0.00000
977	98	HIS	CA	-46.75592	-39.59530	105.05785	B1	16	0.00000
978	98	HIS	CB	-46.00867	-40.61029	104.19437	B1	16	0.00000
979	98	HIS	CG	-45.38253	-39.98357	102.97364	B1	16	0.00000
980	98	HIS	ND1	-45.88967	-40.13539	101.74183	B1	16	0.00000
981	98	HIS	HD1	-46.72307	-40.60043	101.51181	B1	16	0.00000
982	98	HIS	CD2	-44.21266	-39.22166	102.89430	B1	16	0.00000
983	98	HIS	NE2	-44.02276	-38.92334	101.58753	B1	16	0.00000
984	98	HIS	CE1	-45.05268	-39.48062	100.87633	B1	16	0.00000
985	98	HIS	C	-47.56750	-40.40062	106.05217	B1	16	0.00000
986	98	HIS	O	-47.04279	-40.99638	106.99225	B1	16	0.00000
987	99	PHE	N	-48.87987	-40.39547	105.81218	B1	17	0.00000
988	99	PHE	H	-49.25243	-39.92869	105.00666	B1	17	0.00000
989	99	PHE	CA	-49.78029	-41.01889	106.77662	B1	17	0.00000
990	99	PHE	CB	-50.48946	-39.93190	107.59234	B1	17	0.00000
991	99	PHE	CG	-49.63868	-39.72312	108.81497	B1	17	0.00000
992	99	PHE	CD1	-48.50685	-38.87580	108.76543	B1	17	0.00000
993	99	PHE	CD2	-49.92563	-40.47457	109.97439	B1	17	0.00000
994	99	PHE	CE1	-47.64103	-38.80002	109.87537	B1	17	0.00000
995	99	PHE	CE2	-49.06252	-40.39779	111.08254	B1	17	0.00000
996	99	PHE	CZ	-47.92137	-39.56658	111.02626	B1	17	0.00000
997	99	PHE	C	-50.79242	-41.97404	106.19800	B1	17	0.00000
998	99	PHE	O	-51.48007	-41.71068	105.22101	B1	17	0.00000
999	100	PHE	N	-50.86837	-43.12653	106.85844	B1	18	0.00000
1000	100	PHE	H	-50.32768	-43.27017	107.68944	B1	18	0.00000
1001	100	PHE	CA	-51.84718	-44.10783	106.41132	B1	18	0.00000
1002	100	PHE	CB	-51.44468	-45.52210	106.84262	B1	18	0.00000
1003	100	PHE	CG	-51.08740	-46.34931	105.63001	B1	18	0.00000
1004	100	PHE	CD1	-49.81159	-46.95065	105.55366	B1	18	0.00000
1005	100	PHE	CD2	-52.01269	-46.50158	104.56911	B1	18	0.00000
1006	100	PHE	CE1	-49.45012	-47.69723	104.41336	B1	18	0.00000
1007	100	PHE	CE2	-51.65494	-47.24829	103.42719	B1	18	0.00000
1008	100	PHE	CZ	-50.37408	-47.83859	103.35608	B1	18	0.00000
1009	100	PHE	C	-53.21727	-43.84401	106.96975	B1	18	0.00000
1010	100	PHE	O	-53.38235	-43.49692	108.13319	B1	18	0.00000
1011	101	ASN	N	-54.19611	-44.08275	106.08672	B1	19	0.00000
1012	101	ASN	H	-53.92777	-44.28429	105.14366	B1	19	0.00000
1013	101	ASN	CA	-55.63451	-43.97453	106.37273	B1	19	0.00000
1014	101	ASN	CB	-56.35400	-45.03359	105.52094	B1	19	0.00000
1015	101	ASN	CG	-57.86040	-44.83624	105.52911	B1	19	0.00000
1016	101	ASN	OD1	-58.43246	-44.06601	104.77523	B1	19	0.00000
1017	101	ASN	ND2	-58.51327	-45.52184	106.41359	B1	19	0.00000
1018	101	ASN	HD21	-58.04843	-46.21753	107.02623	B1	19	0.00000
1019	101	ASN	HD22	-59.50666	-45.49785	106.46882	B1	19	0.00000
1020	101	ASN	C	-56.06277	-44.09262	107.83398	B1	19	0.00000

FIG. 17

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FIG. 18

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1085	107	ARG	HH22	-42.	04	-45.11997	101.94496	B1	25	0.00000
1086	107	ARG	C	-42.37787		-41.03546	106.32504	B1	25	0.00000
1087	107	ARG	O	-43.36896		-40.31981	106.43645	B1	25	0.00000
1088	108	LEU	N	-41.12633		-40.58602	106.39627	B1	26	0.00000
1089	108	LEU	H	-40.32617		-41.17985	106.29320	B1	26	0.00000
1090	108	LEU	CA	-40.89942		-39.15744	106.53751	B1	26	0.00000
1091	108	LEU	CB	-40.80087		-38.80954	108.01248	B1	26	0.00000
1092	108	LEU	CG	-41.96347		-37.89689	108.35874	B1	26	0.00000
1093	108	LEU	CD1	-42.75820		-38.44729	109.53808	B1	26	0.00000
1094	108	LEU	CD2	-41.50070		-36.44650	108.50151	B1	26	0.00000
1095	108	LEU	C	-39.62061		-38.77273	105.85764	B1	26	0.00000
1096	108	LEU	O	-38.76368		-39.61093	105.60154	B1	26	0.00000
1097	109	LEU	N	-39.52150		-37.47828	105.56773	B1	27	0.00000
1098	109	LEU	H	-40.28459		-36.84167	105.72467	B1	27	0.00000
1099	109	LEU	CA	-38.30683		-37.02679	104.90334	B1	27	0.00000
1100	109	LEU	CB	-38.47418		-37.24039	103.39009	B1	27	0.00000
1101	109	LEU	CG	-39.74490		-36.59695	102.82634	B1	27	0.00000
1102	109	LEU	CD1	-39.42210		-35.25631	102.17066	B1	27	0.00000
1103	109	LEU	CD2	-40.49190		-37.56523	101.91138	B1	27	0.00000
1104	109	LEU	C	-37.99969		-35.58061	105.21268	B1	27	0.00000
1105	109	LEU	O	-38.88411		-34.77322	105.47943	B1	27	0.00000
1106	110	GLU	N	-36.70092		-35.29768	105.12126	B1	28	0.00000
1107	110	GLU	H	-36.01498		-36.01786	105.00992	B1	28	0.00000
1108	110	GLU	CA	-36.20315		-33.92985	105.08184	B1	28	0.00000
1109	110	GLU	CB	-35.80577		-33.47627	106.49578	B1	28	0.00000
1110	110	GLU	CG	-35.32216		-32.02210	106.60993	B1	28	0.00000
1111	110	GLU	CD	-33.63608		-31.67178	106.30413	B1	28	0.00000
1112	110	GLU	OE1	-33.37957		-30.74951	106.10521	B1	28	0.00000
1113	110	GLU	OE2	-33.05671		-32.85201	106.36491	B1	28	0.00000
1114	110	GLU	C	-35.01026		-33.94076	104.15500	B1	28	0.00000
1115	110	GLU	O	-34.25577		-34.90807	104.11585	B1	28	0.00000
1116	111	ARG	N	-34.89439		-32.86843	103.37222	B1	29	0.00000
1117	111	ARG	H	-35.61365		-32.16766	103.37387	B1	29	0.00000
1118	111	ARG	CA	-33.75645		-32.74903	102.46249	B1	29	0.00000
1119	111	ARG	CB	-33.99004		-33.60407	101.20352	B1	29	0.00000
1120	111	ARG	CG	-35.45106		-33.70037	100.75305	B1	29	0.00000
1121	111	ARG	CD	-35.67880		-34.83036	99.75174	B1	29	0.00000
1122	111	ARG	NE	-37.09124		-35.21147	99.72614	B1	29	0.00000
1123	111	ARG	HE	-37.71860		-34.61357	100.22757	B1	29	0.00000
1124	111	ARG	CZ	-37.50098		-36.32384	99.09789	B1	29	0.00000
1125	111	ARG	NH1	-38.78116		-36.68971	99.16119	B1	29	0.00000
1126	111	ARG	NH11	-39.12269		-37.49888	98.68276	B1	29	0.00000
1127	111	ARG	NH12	-39.43712		-36.16699	99.70940	B1	29	0.00000
1128	111	ARG	NH2	-36.63391		-37.06893	98.41518	B1	29	0.00000
1129	111	ARG	NH21	-36.91501		-37.90348	97.94325	B1	29	0.00000
1130	111	ARG	NH22	-35.67503		-36.78688	98.36264	B1	29	0.00000
1131	111	ARG	C	-33.49135		-31.31194	102.08170	B1	29	0.00000
1132	111	ARG	O	-34.39395		-30.54569	101.76699	B1	29	0.00000
1133	112	CYS	N	-32.20568		-30.97057	102.12414	B1	30	0.00000
1134	112	CYS	H	-31.50733		-31.64380	102.37455	B1	30	0.00000
1135	112	CYS	CA	-31.80468		-29.62360	101.73826	B1	30	0.00000
1136	112	CYS	CB	-31.12874		-28.92365	102.91930	B1	30	0.00000
1137	112	CYS	SG	-30.70297		-27.19555	102.57697	B1	30	0.00000
1138	112	CYS	C	-30.87388		-29.64998	100.54380	B1	30	0.00000
1139	112	CYS	O	-29.97769		-30.48052	100.40406	B1	30	0.00000
1140	113	ILE	N	-31.15975		-28.70696	99.65078	B1	31	0.00000
1141	113	ILE	H	-31.84193		-28.00116	99.86111	B1	31	0.00000
1142	113	ILE	CA	-30.55305		-28.70228	98.32464	B1	31	0.00000
1143	113	ILE	CB	-31.56021		-29.33526	97.30706	B1	31	0.00000
1144	113	ILE	CG2	-33.00339		-29.37434	97.82323	B1	31	0.00000
1145	113	ILE	CG1	-31.52431		-28.74164	95.89635	B1	31	0.00000
1146	113	ILE	CD	-32.44047		-29.50025	94.92272	B1	31	0.00000
1147	113	ILE	C	-33.08576		-27.29665	97.96536	B1	31	0.00000
1148	113	ILE	O	-30.75333		-26.25900	98.21317	B1	31	0.00000

FIG. 19

114	TYR	N	-28.110	-27.25564	97.41665	B1	32	0.00000	
1150	114	TYR	H	-28.42970	-28.10151	97.10297	D1	32	0.00000
1151	114	TYR	CA	-28.22036	-25.98264	97.11462	B1	32	0.00000
1152	114	TYR	CB	-26.80088	-26.01933	97.71345	B1	32	0.00000
1153	114	TYR	CG	-26.01127	-24.72107	97.61311	B1	32	0.00000
1154	114	TYR	CD1	-26.62770	-23.45825	97.79068	B1	32	0.00000
1155	114	TYR	CE1	-25.84886	-22.28083	97.75267	B1	32	0.00000
1156	114	TYR	CD2	-24.61824	-24.80211	97.38751	B1	32	0.00000
1157	114	TYR	CE2	-23.83841	-23.62651	97.34588	B1	32	0.00000
1158	114	TYR	CZ	-24.45600	-22.36940	97.53154	B1	32	0.00000
1159	114	TYR	OH	-23.68967	-21.21917	97.50979	B1	32	0.00000
1160	114	TYR	HH	-22.79676	-21.43015	97.21984	B1	32	0.00000
1161	114	TYR	C	-28.14723	-25.83215	95.61430	B1	32	0.00000
1162	114	TYR	O	-27.66375	-26.70965	94.91236	B1	32	0.00000
1163	115	ASN	N	-28.66823	-24.69995	95.12919	B1	33	0.00000
1164	115	ASN	H	-29.03092	-24.02391	95.77643	B1	33	0.00000
1165	115	ASN	CA	-28.63762	-24.41545	93.68566	B1	33	0.00000
1166	115	ASN	CB	-27.27049	-23.84385	93.27078	B1	33	0.00000
1167	115	ASN	CG	-27.00239	-22.43118	93.78440	B1	33	0.00000
1168	115	ASN	OD1	-26.55389	-22.16954	94.85370	B1	33	0.00000
1169	115	ASN	ND2	-27.51765	-21.48359	92.96271	B1	33	0.00000
1170	115	ASN	HD21	-28.04883	-21.70692	92.14797	B1	33	0.00000
1171	115	ASN	HD22	-27.29503	-20.52370	93.13946	B1	33	0.00000
1172	115	ASN	C	-28.96318	-25.59300	92.77321	B1	33	0.00000
1173	115	ASN	O	-28.22150	-25.91402	91.85250	B1	33	0.00000
1174	116	GLN	N	-30.10651	-26.23583	93.07767	B1	34	0.00000
1175	116	GLN	H	-30.66790	-25.52614	93.84830	B1	34	0.00000
1176	116	GLN	CA	-30.60575	-27.38897	92.31212	B1	34	0.00000
1177	116	GLN	CB	-30.73906	-26.98635	90.82631	B1	34	0.00000
1178	116	GLN	CG	-31.33401	-27.96419	89.80983	B1	34	0.00000
1179	116	GLN	CD	-31.33954	-27.31473	88.43508	B1	34	0.00000
1180	116	GLN	OE1	-32.32002	-27.33002	87.70605	B1	34	0.00000
1181	116	GLN	NE2	-30.20428	-26.71450	88.08185	B1	34	0.00000
1182	116	GLN	HE21	-29.39553	-26.71396	88.67007	B1	34	0.00000
1183	116	GLN	HE22	-30.15594	-26.24641	87.20205	B1	34	0.00000
1184	116	GLN	C	-29.89899	-28.73663	92.53043	B1	34	0.00000
1185	116	GLN	O	-30.38571	-29.77653	92.10767	B1	34	0.00000
1186	117	GLU	N	-28.76921	-28.72803	93.24838	B1	35	0.00000
1187	117	GLU	H	-28.34990	-27.88576	93.59525	B1	35	0.00000
1188	117	GLU	CA	-28.17324	-30.02538	93.58636	B1	35	0.00000
1189	117	GLU	CB	-26.68237	-30.02305	93.23572	B1	35	0.00000
1190	117	GLU	CG	-26.41125	-29.71932	91.75724	B1	35	0.00000
1191	117	GLU	CD	-24.93459	-29.87167	91.43636	B1	35	0.00000
1192	117	GLU	OE1	-24.62388	-30.40776	90.37359	B1	35	0.00000
1193	117	GLU	OE2	-24.09945	-29.45965	92.24135	B1	35	0.00000
1194	117	GLU	C	-28.34342	-30.35133	95.05360	B1	35	0.00000
1195	117	GLU	O	-28.39032	-29.54087	95.93593	B1	35	0.00000
1196	118	GLU	N	-28.45418	-31.70267	95.31151	B1	36	0.00000
1197	118	GLU	H	-28.37884	-32.37663	94.57056	B1	36	0.00000
1198	118	GLU	CA	-20.64640	-32.12718	96.70504	B1	36	0.00000
1199	118	GLU	CB	-28.86529	-33.64399	96.80220	B1	36	0.00000
1200	118	GLU	CG	-30.04621	-34.25904	96.04454	B1	36	0.00000
1201	118	GLU	CD	-30.18685	-35.73854	96.39969	B1	36	0.00000
1202	118	GLU	OE1	-31.31366	-36.18552	96.62004	B1	36	0.00000
1203	118	GLU	OE2	-29.17775	-36.44658	96.46236	B1	36	0.00000
1204	118	GLU	C	-27.45968	-31.79603	97.59954	B1	36	0.00000
1205	118	GLU	O	-26.30375	-31.93771	97.22004	B1	36	0.00000
1206	119	SER	N	-27.77719	-31.35385	98.81571	B1	37	0.00000
1207	119	SER	H	-28.73032	-31.22468	99.10568	B1	37	0.00000
1208	119	SER	CA	-26.67523	-31.09310	99.74333	B1	37	0.00000
1209	119	SER	CB	-26.79679	-29.64425	100.25438	B1	37	0.00000
1210	119	SER	CG	-25.62406	-29.23340	100.96654	B1	37	0.00000
1211	119	SER	HG	-25.73840	-28.33730	101.30354	B1	37	0.00000
1212	119	SER	C	-26.64967	-32.10859	100.87599	B1	37	0.00000

FIG. 20

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1213	119	SER	O	-25.7118	-32.90554	101.03211	B1	37	0.00000
1214	120	VAL	N	-27.72434	-32.06608	101.67561	B1	38	0.00000
1215	120	VAL	H	-28.50026	-31.45938	101.48344	B1	38	0.00000
1216	120	VAL	CA	-27.82678	-32.99802	102.80099	B1	38	0.00000
1217	120	VAL	CB	-27.44790	-32.32244	104.13888	B1	38	0.00000
1218	120	VAL	CG1	-25.93252	-32.18078	104.29388	B1	38	0.00000
1219	120	VAL	CG2	-28.15631	-30.97900	104.33500	B1	38	0.00000
1220	120	VAL	C	-29.23777	-33.53625	102.89372	B1	38	0.00000
1221	120	VAL	O	-30.19812	-32.88656	102.49711	B1	38	0.00000
1222	121	ARG	N	-29.34164	-34.75356	103.41944	B1	39	0.00000
1223	121	ARG	H	-28.52525	-35.27675	103.67737	B1	39	0.00000
1224	121	ARG	CA	-30.65941	-35.37282	103.49447	B1	39	0.00000
1225	121	ARG	CB	-30.83879	-36.26556	102.25451	B1	39	0.00000
1226	121	ARG	CG	-32.24891	-36.83907	102.13977	B1	39	0.00000
1227	121	ARG	CD	-32.36448	-38.11228	101.31436	B1	39	0.00000
1228	121	ARG	NE	-33.46636	-38.89614	101.86585	B1	39	0.00000
1229	121	ARG	HE	-33.58314	-38.82444	102.86363	B1	39	0.00000
1230	121	ARG	CZ	-34.21779	-39.71705	101.13259	B1	39	0.00000
1231	121	ARG	NH1	-35.18842	-40.40193	101.73316	B1	39	0.00000
1232	121	ARG	NH11	-35.77971	-41.03741	101.23780	B1	39	0.00000
1233	121	ARG	NH12	-35.33365	-40.28453	102.71808	B1	39	0.00000
1234	121	ARG	NH2	-33.99786	-39.84536	99.82444	B1	39	0.00000
1235	121	ARG	NH21	-34.53079	-40.47140	99.25675	B1	39	0.00000
1236	121	ARG	NH22	-33.27054	-39.30635	99.39731	B1	39	0.00000
1237	121	ARG	C	-30.80743	-36.21013	104.75602	B1	39	0.00000
1238	121	ARG	O	-29.86515	-36.62872	105.23483	B1	39	0.00000
1239	122	PHE	N	-32.04075	-36.24055	105.26404	B1	40	0.00000
1240	122	PHE	H	-32.75061	-35.63810	104.89111	B1	40	0.00000
1241	122	PHE	CA	-32.40668	-37.26064	106.24769	B1	40	0.00000
1242	122	PHE	CB	-33.75724	-36.87165	106.85296	B1	40	0.00000
1243	122	PHE	CG	-33.64992	-36.46831	108.30418	B1	40	0.00000
1244	122	PHE	CD1	-32.56100	-35.69712	108.77664	B1	40	0.00000
1245	122	PHE	CD2	-34.66985	-36.87929	109.19094	B1	40	0.00000
1246	122	PHE	CE1	-32.49275	-35.34303	110.14035	B1	40	0.00000
1247	122	PHE	CE2	-34.60187	-36.52254	110.55431	B1	40	0.00000
1248	122	PHE	CZ	-33.51285	-35.75823	111.02379	B1	40	0.00000
1249	122	PHE	C	-32.57844	-38.62424	105.60697	B1	40	0.00000
1250	122	PHE	O	-33.34168	-38.79208	104.65587	B1	40	0.00000
1251	123	ASP	N	-31.06201	-39.60796	106.15389	B1	41	0.00000
1252	123	ASP	H	-31.23184	-39.47015	106.92548	B1	41	0.00000
1253	123	ASP	CA	-32.08552	-40.93522	105.58825	B1	41	0.00000
1254	123	ASP	CB	-30.85171	-41.81726	105.76445	B1	41	0.00000
1255	123	ASP	CG	-29.93161	-41.56041	104.59405	B1	41	0.00000
1256	123	ASP	OD1	-28.81173	-41.11310	104.81757	B1	41	0.00000
1257	123	ASP	OD2	-30.34905	-41.80191	103.45856	B1	41	0.00000
1258	123	ASP	C	-33.32362	-41.63618	106.09965	B1	41	0.00000
1259	123	ASP	O	-34.00966	-41.21121	107.02319	B1	41	0.00000
1260	124	SER	N	-33.62443	-42.74250	105.41429	B1	42	0.00000
1261	124	SER	H	-32.95329	-43.10971	104.76900	B1	42	0.00000
1262	124	SER	CA	-34.94425	-43.35498	105.58880	B1	42	0.00000
1263	124	SER	CB	-35.18779	-44.37028	104.46149	B1	42	0.00000
1264	124	SER	OG	-36.57945	-44.70776	104.37671	B1	42	0.00000
1265	124	SER	HG	-36.91089	-44.87590	105.27413	B1	42	0.00000
1266	124	SER	C	-35.21640	-44.01057	106.93634	B1	42	0.00000
1267	124	SER	O	-36.33538	-44.42223	107.22372	B1	42	0.00000
1268	125	ASP	N	-34.16447	-44.10325	107.74330	B1	43	0.00000
1269	125	ASP	H	-33.26228	-43.73425	107.50494	B1	43	0.00000
1270	125	ASP	CA	-34.30492	-44.60689	109.10471	B1	43	0.00000
1271	125	ASP	CB	-32.96210	-45.24580	109.50620	B1	43	0.00000
1272	125	ASP	CG	-31.82155	-44.23245	109.55779	B1	43	0.00000
1273	125	ASP	OD1	-31.89194	-43.19553	108.89075	B1	43	0.00000
1274	125	ASP	OD2	-30.67249	-44.45676	110.29614	B1	43	0.00000
1275	125	ASP	C	-34.69374	-43.52244	110.10428	B1	43	0.00000
1276	125	ASP	O	-35.10540	-43.76441	111.22672	B1	43	0.00000

FIG. 21

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1277	126	VAL	N	-34.51	-42.26751	109.64790	B1	44	0.00000
1278	126	VAL	H	-34.20939	-42.12308	108.70456	B1	44	0.00000
1279	126	VAL	CA	-34.59346	-41.07914	110.50496	B1	44	0.00000
1280	126	VAL	CB	-36.04814	-40.82462	110.97592	B1	44	0.00000
1281	126	VAL	CG1	-36.22164	-39.41758	111.54094	B1	44	0.00000
1282	126	VAL	CG2	-37.04494	-41.00281	109.82481	B1	44	0.00000
1283	126	VAL	C	-33.57625	-41.13739	111.64961	B1	44	0.00000
1284	126	VAL	O	-33.78819	-40.75401	112.79533	B1	44	0.00000
1285	127	GLY	N	-32.41541	-41.66443	111.25324	B1	45	0.00000
1286	127	GLY	H	-32.31598	-42.01122	110.31755	B1	45	0.00000
1287	127	GLY	CA	-31.32244	-41.88201	112.19529	B1	45	0.00000
1288	127	GLY	C	-29.94594	-41.56889	111.62542	B1	45	0.00000
1289	127	GLY	O	-29.03055	-41.21776	112.35962	B1	45	0.00000
1290	128	GLU	N	-29.81143	-41.65704	110.29545	B1	46	0.00000
1291	128	GLU	H	-30.48653	-42.13586	109.72534	B1	46	0.00000
1292	128	GLU	CA	-28.56256	-41.14297	109.73120	B1	46	0.00000
1293	128	GLU	CB	-27.75197	-42.29481	109.11709	B1	46	0.00000
1294	128	GLU	CG	-26.29316	-42.25781	109.59860	B1	46	0.00000
1295	128	GLU	CD	-25.44181	-43.20422	108.87693	B1	46	0.00000
1296	128	GLU	OE1	-24.49646	-42.88073	108.19992	B1	46	0.00000
1297	128	GLU	OE2	-25.71010	-44.47773	109.00348	B1	46	0.00000
1298	128	GLU	C	-28.71376	-39.98012	108.75031	B1	46	0.00000
1299	128	GLU	O	-29.80604	-39.57375	108.35724	B1	46	0.00000
1300	129	TYR	N	-27.54735	-39.42619	108.38931	B1	47	0.00000
1301	129	TYR	H	-26.68498	-39.83420	108.68820	B1	47	0.00000
1302	129	TYR	CA	-27.50019	-38.29454	107.46434	B1	47	0.00000
1303	129	TYR	CB	-26.63842	-37.15326	108.01560	B1	47	0.00000
1304	129	TYR	CG	-27.30857	-36.34222	109.09443	B1	47	0.00000
1305	129	TYR	CD1	-26.67181	-36.21958	110.34811	B1	47	0.00000
1306	129	TYR	CE1	-27.25566	-35.42131	111.35148	B1	47	0.00000
1307	129	TYR	CD2	-20.52827	-35.67832	108.83210	B1	47	0.00000
1308	129	TYR	CE2	-29.11235	-34.88063	109.83571	B1	47	0.00000
1309	129	TYR	CZ	-28.47327	-34.75726	111.08860	B1	47	0.00000
1310	129	TYR	OH	-29.05005	-33.98459	112.07221	B1	47	0.00000
1311	129	TYR	HH	-29.70394	-33.40059	111.67732	B1	47	0.00000
1312	129	TYR	C	-26.82531	-38.64384	106.15941	B1	47	0.00000
1313	129	TYR	O	-25.66697	-39.04407	106.10492	B1	47	0.00000
1314	130	ARG	N	-27.55686	-38.38162	105.08581	B1	48	0.00000
1315	130	ARG	H	-28.51666	-38.10451	105.16735	B1	48	0.00000
1316	130	ARG	CA	-26.07326	-38.41254	103.80227	B1	48	0.00000
1317	130	ARG	CB	-27.85650	-38.84699	102.71647	B1	48	0.00000
1318	130	ARG	CG	-27.21143	-39.00526	101.34112	B1	48	0.00000
1319	130	ARG	CD	-28.23975	-39.41974	100.29808	B1	48	0.00000
1320	130	ARG	NE	-27.66322	-39.38333	98.95629	B1	48	0.00000
1321	130	ARG	HE	-26.82589	-38.85034	98.82833	B1	48	0.00000
1322	130	ARG	CZ	-28.29934	-39.96348	97.93202	B1	48	0.00000
1323	130	ARG	NH1	-27.82365	-39.81313	96.69917	B1	48	0.00000
1324	130	ARG	NH11	-28.26738	-40.23513	95.90996	B1	48	0.00000
1325	130	ARG	NH12	-27.01064	-39.25297	96.53955	B1	48	0.00000
1326	130	ARG	NH2	-29.39843	-40.68730	98.14392	B1	48	0.00000
1327	130	ARG	NH21	-29.90446	-41.10492	97.39118	B1	48	0.00000
1328	130	ARG	NH22	-29.72741	-40.81930	99.07957	B1	48	0.00000
1329	130	ARG	C	-26.28084	-37.06053	103.45986	B1	48	0.00000
1330	130	ARG	O	-26.96293	-36.11772	103.07688	B1	48	0.00000
1331	131	ALA	N	-24.95816	-36.99899	103.58668	B1	49	0.00000
1332	131	ALA	H	-24.45069	-37.77908	103.95192	B1	49	0.00000
1333	131	ALA	CA	-24.28607	-35.84094	102.98902	B1	49	0.00000
1334	131	ALA	CB	-23.06137	-35.44271	103.80801	B1	49	0.00000
1335	131	ALA	C	-23.85084	-36.20633	101.58658	B1	49	0.00000
1336	131	ALA	O	-23.17892	-37.20652	101.36065	B1	49	0.00000
1337	132	VAL	N	-24.28495	-35.38774	100.63154	B1	50	0.00000
1338	132	VAL	H	-24.78984	-34.54695	100.25567	B1	50	0.00000
1339	132	VAL	CA	-24.05920	-35.79619	99.24152	B1	50	0.00000
1340	132	VAL	CB	-25.12578	-35.11200	99.36560	B1	50	0.00000

FIG. 22

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1341	132	VAL	CG1	-25.05	-35.45687	96.87606	B1	50	0.00000
1342	132	VAL	CG2	-26.51048	-35.48853	98.85777	B1	50	0.00000
1343	132	VAL	C	-22.64446	-35.53393	98.73419	B1	50	0.00000
1344	132	VAL	O	-22.12598	-36.19257	97.84114	B1	50	0.00000
1345	133	THR	N	-22.01646	-34.53567	99.35299	B1	51	0.00000
1346	133	THR	H	-22.44036	-34.04272	100.11190	B1	51	0.00000
1347	133	THR	CA	-20.68297	-34.13851	98.91128	B1	51	0.00000
1348	133	THR	CB	-20.84979	-33.09962	97.76600	B1	51	0.00000
1349	133	THR	OG1	-19.58519	-32.56706	97.34397	B1	51	0.00000
1350	133	THR	HG1	-19.69018	-32.10136	96.50551	B1	51	0.00000
1351	133	THR	CG2	-21.81730	-31.96947	98.12788	B1	51	0.00000
1352	133	THR	C	-19.91735	-33.59750	100.10846	B1	51	0.00000
1353	133	THR	O	-20.48697	-33.30952	101.15881	B1	51	0.00000
1354	134	GLU	N	-18.60119	-33.44216	99.91793	B1	52	0.00000
1355	134	GLU	H	-18.20352	-33.65725	99.02398	B1	52	0.00000
1356	134	GLU	CA	-17.75238	-32.88738	100.97647	B1	52	0.00000
1357	134	GLU	CB	-16.30452	-32.81284	100.49482	B1	52	0.00000
1358	134	GLU	CG	-15.76229	-34.17073	100.03844	B1	52	0.00000
1359	134	GLU	CD	-14.31377	-34.04410	99.60488	B1	52	0.00000
1360	134	GLU	OE1	-13.54341	-34.96158	99.88007	B1	52	0.00000
1361	134	GLU	OE2	-13.96021	-33.03519	98.99487	B1	52	0.00000
1362	134	GLU	C	-18.18601	-31.51310	101.45728	B1	52	0.00000
1363	134	GLU	O	-17.97884	-31.11916	102.59352	B1	52	0.00000
1364	135	LEU	N	-18.87611	-30.80674	100.55812	B1	53	0.00000
1365	135	LEU	H	-18.92762	-31.13340	99.61398	B1	53	0.00000
1366	135	LEU	CA	-19.55727	-29.57029	100.94521	B1	53	0.00000
1367	135	LEU	CB	-20.25914	-29.06218	99.70959	B1	53	0.00000
1368	135	LEU	CG	-20.12211	-27.57937	99.38843	B1	53	0.00000
1369	135	LEU	CD1	-20.93390	-26.68772	100.32666	B1	53	0.00000
1370	135	LEU	CD2	-18.63204	-27.23870	99.36436	B1	53	0.00000
1371	135	LEU	C	-20.53099	-29.72915	102.11412	B1	53	0.00000
1372	135	LEU	O	-20.60025	-28.93514	103.04463	B1	53	0.00000
1373	136	GLY	N	-21.29082	-30.82221	102.02891	B1	54	0.00000
1374	136	GLY	H	-21.14062	-31.49656	101.30480	B1	54	0.00000
1375	136	GLY	CA	-22.25373	-31.10000	103.08935	B1	54	0.00000
1376	136	GLY	C	-21.66227	-31.85099	104.26834	B1	54	0.00000
1377	136	GLY	O	-22.17280	-31.82013	105.38053	B1	54	0.00000
1378	137	ARG	N	-20.54192	-32.53644	104.01306	B1	55	0.00000
1379	137	ARG	H	-20.17033	-32.57514	103.08296	B1	55	0.00000
1380	137	ARG	CA	-19.94165	-33.32437	105.09532	B1	55	0.00000
1381	137	ARG	CB	-18.67070	-34.02762	104.58318	B1	55	0.00000
1382	137	ARG	CG	-18.13008	-35.07893	105.55025	B1	55	0.00000
1383	137	ARG	CD	-19.16855	-36.15719	105.85371	B1	55	0.00000
1384	137	ARG	NE	-18.66781	-37.06640	106.87657	B1	55	0.00000
1385	137	ARG	HE	-17.93002	-36.71980	107.47204	B1	55	0.00000
1386	137	ARG	CZ	-19.21896	-38.26612	107.07006	B1	55	0.00000
1387	137	ARG	NH1	-18.67534	-39.07643	107.97489	B1	55	0.00000
1388	137	ARG	NH11	-19.03969	-39.99255	108.14749	B1	55	0.00000
1389	137	ARG	NH12	-17.88763	-38.75541	108.49972	B1	55	0.00000
1390	137	ARG	NH2	-20.29085	-38.64369	106.37214	B1	55	0.00000
1391	137	ARG	NH21	-20.72192	-39.53705	106.49834	B1	55	0.00000
1392	137	ARG	NH22	-20.68879	-38.01490	105.70437	B1	55	0.00000
1393	137	ARG	C	-19.76330	-32.65026	106.46929	B1	55	0.00000
1394	137	ARG	O	-20.33202	-33.13638	107.44172	B1	55	0.00000
1395	138	PRO	N	-19.03095	-31.51331	106.56277	B1	56	0.00000
1396	138	PRO	CD	-18.26903	-30.78028	105.55482	B1	56	0.00000
1397	138	PRO	CA	-10.92500	-30.86885	107.87839	B1	56	0.00000
1398	138	PRO	CB	-18.00966	-29.66775	107.61416	B1	56	0.00000
1399	138	PRO	CG	-17.22921	-30.01427	106.35369	B1	56	0.00000
1400	138	PRO	C	-20.24853	-30.39451	108.45452	B1	56	0.00000
1401	138	PRO	O	-20.38673	-30.20105	109.65243	B1	56	0.00000
1402	139	ASP	N	-21.22622	-30.19407	107.56513	B1	57	0.00000
1403	139	ASP	H	-21.12955	-30.45258	106.60295	B1	57	0.00000
1404	139	ASP	CA	-22.54445	-29.76374	108.02615	B1	57	0.00000

FIG. 23

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1405	139	ASP	CB	-23.2	1	-29.22794	106.80729	B1	57	0.00000
1406	139	ASP	CG	-24.50000		-28.44150	107.23406	B1	57	0.00000
1407	139	ASP	OD1	-24.33925		-27.25955	107.53698	B1	57	0.00000
1408	139	ASP	OD2	-25.59590		-29.00937	107.24891	B1	57	0.00000
1409	139	ASP	C	-23.29009		-30.90651	108.70646	B1	57	0.00000
1410	139	ASP	O	-23.84428		-30.79944	109.79628	B1	57	0.00000
1411	140	ALA	N	-23.18867		-32.06950	108.04975	B1	58	0.00000
1412	140	ALA	H	-22.77745		-32.09325	107.13514	B1	58	0.00000
1413	140	ALA	CA	-23.64141		-33.29863	108.70194	B1	58	0.00000
1414	140	ALA	CB	-23.39932		-34.51285	107.80148	B1	58	0.00000
1415	140	ALA	C	-22.96994		-33.52591	110.04660	B1	58	0.00000
1416	140	ALA	O	-23.61501		-33.62460	111.08086	B1	58	0.00000
1417	141	GLU	N	-21.63141		-33.53710	110.01537	B1	59	0.00000
1418	141	GLU	H	-21.14260		-33.44422	109.14251	B1	59	0.00000
1419	141	GLU	CA	-20.88131		-33.73045	111.26272	B1	59	0.00000
1420	141	GLU	CB	-19.38545		-33.75474	110.92637	B1	59	0.00000
1421	141	GLU	CG	-19.08157		-34.92155	109.97183	B1	59	0.00000
1422	141	GLU	CD	-17.65605		-34.91070	109.44677	B1	59	0.00000
1423	141	GLU	OE1	-17.21662		-35.95752	108.96182	B1	59	0.00000
1424	141	GLU	OE2	-16.99658		-33.87375	109.50268	B1	59	0.00000
1425	141	GLU	C	-21.20315		-32.72395	112.36696	B1	59	0.00000
1426	141	GLU	O	-21.35204		-33.05368	113.53869	B1	59	0.00000
1427	142	TYR	N	-21.39109		-31.47026	111.93865	B1	60	0.00000
1428	142	TYR	H	-21.16858		-31.22939	110.99159	B1	60	0.00000
1429	142	TYR	CA	-21.91640		-30.42572	112.82625	B1	60	0.00000
1430	142	TYR	CB	-22.17510		-29.18770	111.95478	B1	60	0.00000
1431	142	TYR	CG	-22.15441		-27.86866	112.68902	B1	60	0.00000
1432	142	TYR	CD1	-20.91930		-27.21121	112.86286	B1	60	0.00000
1433	142	TYR	CE1	-20.89216		-25.94177	113.49633	B1	60	0.00000
1434	142	TYR	CD2	-23.36373		-27.27306	113.11310	B1	60	0.00000
1435	142	TYR	CE2	-23.33600		-26.00211	113.72688	B1	60	0.00000
1436	142	TYR	CZ	-22.10013		-25.34007	113.91274	B1	60	0.00000
1437	142	TYR	OH	-22.06472		-24.08718	114.49226	B1	60	0.00000
1438	142	TYR	HH	-22.95958		-23.75980	114.62492	B1	60	0.00000
1439	142	TYR	C	-23.20365		-30.84932	113.52485	B1	60	0.00000
1440	142	TYR	O	-23.33185		-30.86335	114.74427	B1	60	0.00000
1441	143	TRP	N	-24.16619		-31.24530	112.69102	B1	61	0.00000
1442	143	TRP	H	-24.01203		-31.27353	111.69669	B1	61	0.00000
1443	143	TRP	CA	-25.46084		-31.65772	113.24427	B1	61	0.00000
1444	143	TRP	CB	-26.46502		-31.82534	112.10045	B1	61	0.00000
1445	143	TRP	CG	-26.82927		-30.51319	111.43167	B1	61	0.00000
1446	143	TRP	CD2	-27.59514		-30.35383	110.26190	B1	61	0.00000
1447	143	TRP	CE2	-27.68725		-28.88192	110.01923	B1	61	0.00000
1448	143	TRP	CE3	-28.23171		-31.24445	109.37526	B1	61	0.00000
1449	143	TRP	CD1	-26.49404		-29.20408	111.84528	B1	61	0.00000
1450	143	TRP	NE1	-26.99373		-28.24161	111.01939	B1	61	0.00000
1451	143	TRP	HE1	-26.86335		-27.27405	111.09738	B1	61	0.00000
1452	143	TRP	CZ2	-28.41151		-28.41903	108.90296	B1	61	0.00000
1453	143	TRP	CZ3	-28.94655		-30.73482	108.27056	B1	61	0.00000
1454	143	TRP	CH2	-29.03488		-29.34388	108.03833	B1	61	0.00000
1455	143	TRP	C	-25.40824		-32.93379	114.07770	B1	61	0.00000
1456	143	TRP	O	-26.13451		-33.11650	115.04995	B1	61	0.00000
1457	144	ASN	N	-24.46546		-33.80055	113.69236	B1	62	0.00000
1458	144	ASN	H	-23.94027		-33.62305	112.85783	B1	62	0.00000
1459	144	ASN	CA	-24.16067		-34.99080	114.49069	B1	62	0.00000
1460	144	ASN	CB	-23.20850		-35.93308	113.73882	B1	62	0.00000
1461	144	ASN	CG	-23.89541		-36.68861	112.61740	B1	62	0.00000
1462	144	ASN	OD1	-23.68155		-36.47075	111.43371	B1	62	0.00000
1463	144	ASN	ND2	-24.72776		-37.64097	113.02365	B1	62	0.00000
1464	144	ASN	HD21	-24.69338		-37.81526	113.99276	B1	62	0.00000
1465	144	ASN	HD22	-25.19584		-38.20406	112.34455	B1	62	0.00000
1466	144	ASN	C	-23.49875		-34.69497	115.82591	B1	62	0.00000
1467	144	ASN	O	-23.43003		-35.54654	116.69914	B1	62	0.00000
1468	145	SER	N	-22.99604		-33.44640	115.97313	B1	63	0.00000

FIG. 24

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1469	145	SER	H	-22.1	10	-32.80428	115.21961	B1	63	0.00000
1470	145	SER	CA	-22.35004		-33.14621	117.25865	B1	63	0.00000
1471	145	SER	CB	-20.91921		-32.73054	117.01176	B1	63	0.00000
1472	145	SER	OG	-20.18983		-32.64180	118.24511	B1	63	0.00000
1473	145	SER	HG	-20.76055		-32.22535	118.91065	B1	63	0.00000
1474	145	SER	C	-23.11027		-32.07614	118.06161	B1	63	0.00000
1475	145	SER	O	-22.67401		-31.68287	119.13941	B1	63	0.00000
1476	146	GLN	N	-24.22180		-31.59037	117.51252	B1	64	0.00000
1477	146	GLN	H	-24.58118		-31.94604	116.64774	B1	64	0.00000
1478	146	GLN	CA	-24.90025		-30.49286	118.19522	B1	64	0.00000
1479	146	GLN	CB	-24.86315		-29.29301	117.23892	B1	64	0.00000
1480	146	GLN	CG	-25.45855		-27.96945	117.72882	B1	64	0.00000
1481	146	GLN	CD	-26.89096		-27.81462	117.25234	B1	64	0.00000
1482	146	GLN	OE1	-27.00837		-27.53609	118.00911	B1	64	0.00000
1483	146	GLN	NE2	-27.06556		-27.97948	115.94329	B1	64	0.00000
1484	146	GLN	HE21	-26.30809		-28.20349	115.33276	B1	64	0.00000
1485	146	GLN	HE22	-27.98288		-27.88997	115.56134	B1	64	0.00000
1486	146	GLN	C	-26.29488		-30.93694	118.57642	B1	64	0.00000
1487	146	GLN	O	-27.21649		-30.91839	117.77294	B1	64	0.00000
1488	147	LYS	N	-26.36947		-31.44426	119.82371	B1	65	0.00000
1489	147	LYS	H	-25.65249		-31.20699	120.47663	B1	65	0.00000
1490	147	LYS	CA	-27.35463		-32.46614	120.21964	B1	65	0.00000
1491	147	LYS	CB	-28.27258		-32.00851	121.37895	B1	65	0.00000
1492	147	LYS	CG	-29.34716		-33.02726	121.84203	B1	65	0.00000
1493	147	LYS	CD	-28.88674		-34.49172	121.97244	B1	65	0.00000
1494	147	LYS	CE	-29.96618		-35.46785	121.47444	B1	65	0.00000
1495	147	LYS	NZ	-29.40221		-36.81034	121.26907	B1	65	0.00000
1496	147	LYS	HZ1	-30.04886		-37.42223	120.71767	B1	65	0.00000
1497	147	LYS	HZ2	-28.53282		-36.76558	120.68922	B1	65	0.00000
1498	147	LYS	HZ3	-29.15199		-37.28892	122.15073	B1	65	0.00000
1499	147	LYS	C	-28.12445		-33.12689	119.09340	B1	65	0.00000
1500	147	LYS	O	-29.30235		-32.90174	118.83883	B1	65	0.00000
1501	148	ASP	N	-27.34620		-34.00916	118.45822	B1	66	0.00000
1502	148	ASP	H	-26.39747		-34.14495	118.75300	B1	66	0.00000
1503	148	ASP	CA	-27.79510		-35.00236	117.48362	B1	66	0.00000
1504	148	ASP	CB	-27.88927		-36.37833	118.17059	B1	66	0.00000
1505	148	ASP	CG	-26.79528		-36.57930	119.21585	B1	66	0.00000
1506	148	ASP	OD1	-25.69280		-36.06325	119.05193	B1	66	0.00000
1507	148	ASP	OD2	-27.07650		-37.20742	120.23524	B1	66	0.00000
1508	148	ASP	C	-29.08887		-34.63043	116.79645	B1	66	0.00000
1509	148	ASP	O	-30.17136		-35.14808	117.04951	B1	66	0.00000
1510	149	LEU	N	-28.92399		-33.61840	115.93941	B1	67	0.00000
1511	149	LEU	H	-27.98965		-33.30949	115.73440	B1	67	0.00000
1512	149	LEU	CA	-30.07076		-32.84036	115.45008	B1	67	0.00000
1513	149	LEU	CB	-29.45399		-31.74267	114.57360	B1	67	0.00000
1514	149	LEU	CG	-30.29432		-30.58223	114.02475	B1	67	0.00000
1515	149	LEU	CD1	-30.85820		-30.92475	112.65290	B1	67	0.00000
1516	149	LEU	CD2	-31.34761		-30.09615	115.02072	B1	67	0.00000
1517	149	LEU	C	-31.17667		-33.69413	114.80952	B1	67	0.00000
1518	149	LEU	O	-32.36472		-33.37859	114.83807	B1	67	0.00000
1519	150	LEU	N	-30.73118		-34.86138	114.32363	B1	68	0.00000
1520	150	LEU	H	-29.75579		-34.94139	114.11621	B1	68	0.00000
1521	150	LEU	CA	-31.59782		-36.02822	114.12850	B1	68	0.00000
1522	150	LEU	CB	-30.74740		-37.29867	114.15286	B1	68	0.00000
1523	150	LEU	CG	-29.89363		-37.44772	112.89569	B1	68	0.00000
1524	150	LEU	CD1	-20.64060		-38.26626	113.18796	B1	68	0.00000
1525	150	LEU	CD2	-30.71709		-38.01712	111.73915	B1	68	0.00000
1526	150	LEU	C	-32.74973		-36.17247	115.10785	B1	68	0.00000
1527	150	LEU	O	-33.89001		-36.01901	114.70350	B1	68	0.00000
1528	151	GLU	N	-32.47441		-36.43576	116.39428	B1	69	0.00000
1529	151	GLU	H	-31.52943		-36.57284	116.72119	B1	69	0.00000
1530	151	GLU	CA	-33.61295		-36.59512	117.30950	B1	69	0.00000
1531	151	GLU	CB	-33.19469		-36.98331	118.72928	B1	69	0.00000
1532	151	GLU	CG	-32.69081		-38.41906	118.86124	B1	69	0.00000

FIG. 25

1532	151	GLU	CD	-31.15287	-38.44464	118.70497	B1	69	0.00000
1534	151	GLU	OE1	-30.71320	-30.33129	117.58148	B1	69	0.00000
1535	151	GLU	OE2	-30.51522	-38.56462	119.72459	B1	69	0.00000
1536	151	GLU	C	-34.55067	-35.41168	117.43857	B1	69	0.00000
1537	151	GLU	O	-35.75790	-35.57313	117.58647	B1	69	0.00000
1538	152	GLN	N	-33.98601	-34.19700	117.35586	B1	70	0.00000
1539	152	GLN	H	-33.00321	-34.10256	117.18602	B1	70	0.00000
1540	152	GLN	CA	-34.89656	-33.04752	117.40695	B1	70	0.00000
1541	152	GLN	CB	-34.15680	-31.71646	117.32018	B1	70	0.00000
1542	152	GLN	CG	-33.46159	-31.26900	118.60094	B1	70	0.00000
1543	152	GLN	CD	-33.23376	-29.77424	118.49387	B1	70	0.00000
1544	152	GLN	OE1	-32.13068	-29.27019	118.36008	B1	70	0.00000
1545	152	GLN	NE2	-34.34656	-29.04682	118.54711	B1	70	0.00000
1546	152	GLN	HE21	-35.24607	-29.46511	118.65663	B1	70	0.00000
1547	152	GLN	HE22	-34.28188	-28.05358	118.46911	B1	70	0.00000
1548	152	GLN	C	-35.89575	-33.04746	116.27182	B1	70	0.00000
1549	152	GLN	O	-37.09756	-32.85841	116.43607	B1	70	0.00000
1550	153	ARG	N	-35.34435	-33.30759	115.08552	B1	71	0.00000
1551	153	ARG	H	-34.35839	-33.48709	114.89299	B1	71	0.00000
1552	153	ARG	CA	-36.25853	-33.42129	119.95947	B1	71	0.00000
1553	153	ARG	CB	-35.46322	-33.43707	112.66564	B1	71	0.00000
1554	153	ARG	CG	-34.84280	-32.07791	112.35054	B1	71	0.00000
1555	153	ARG	CD	-33.88499	-32.22570	111.17839	B1	71	0.00000
1556	153	ARG	NE	-33.53171	-30.95306	110.55166	B1	71	0.00000
1557	153	ARG	HE	-33.79858	-30.09360	110.98860	B1	71	0.00000
1558	153	ARG	CZ	-33.01475	-31.01372	109.31716	B1	71	0.00000
1559	153	ARG	NH1	-32.97943	-29.92906	108.54980	B1	71	0.00000
1560	153	ARG	NH11	-32.81618	-30.04802	107.55422	B1	71	0.00000
1561	153	ARG	NH12	-33.14801	-29.01024	108.90136	B1	71	0.00000
1562	153	ARG	NH2	-32.57787	-32.17691	108.83735	B1	71	0.00000
1563	153	ARG	NH21	-32.40269	-32.29042	107.84355	B1	71	0.00000
1564	153	ARG	NH22	-32.45571	-32.97359	109.42307	B1	71	0.00000
1565	153	ARG	C	-37.16363	-34.62908	114.06926	B1	71	0.00000
1566	153	ARG	O	-38.37029	-34.50228	113.96948	B1	71	0.00000
1567	154	ARG	N	-36.57082	-35.79410	114.34569	B1	72	0.00000
1568	154	ARG	H	-35.57655	-35.83805	114.34685	B1	72	0.00000
1569	154	ARG	CA	-37.32441	-37.02834	114.59374	B1	72	0.00000
1570	154	ARG	CB	-36.30561	-38.11823	115.12926	B1	72	0.00000
1571	154	ARG	CG	-37.06240	-39.46786	115.22908	B1	72	0.00000
1572	154	ARG	CD	-36.14056	-40.61269	115.69023	B1	72	0.00000
1573	154	ARG	NE	-36.90866	-41.85162	115.80184	B1	72	0.00000
1574	154	ARG	HE	-37.59626	-42.01330	115.09038	B1	72	0.00000
1575	154	ARG	CZ	-36.70093	-42.71372	116.80504	B1	72	0.00000
1576	154	ARG	NH1	-37.45795	-43.80593	116.88687	B1	72	0.00000
1577	154	ARG	NH11	-37.33416	-44.47837	117.61587	B1	72	0.00000
1578	154	ARG	NH12	-38.17495	-43.96809	116.20728	B1	72	0.00000
1579	154	ARG	NH2	-35.75363	-42.48325	117.71513	B1	72	0.00000
1580	154	ARG	NH21	-35.59042	-43.10493	118.48012	B1	72	0.00000
1581	154	ARG	NH22	-35.18100	-41.66590	117.63709	B1	72	0.00000
1582	154	ARG	C	-38.52465	-36.86141	115.51516	B1	72	0.00000
1583	154	ARG	O	-39.58964	-37.43301	115.28503	B1	72	0.00000
1584	155	ARG	N	-38.35223	-36.06670	116.55472	B1	73	0.00000
1585	155	ARG	H	-37.44332	-35.69920	116.77047	B1	73	0.00000
1586	155	ARG	CA	-39.52250	-35.72569	117.36371	B1	73	0.00000
1587	155	ARG	CB	-39.05476	-34.79593	118.48265	B1	73	0.00000
1588	155	ARG	CG	-40.15723	-34.36970	119.44775	B1	73	0.00000
1589	155	ARG	CD	-39.62900	-33.36327	120.46128	B1	73	0.00000
1590	155	ARG	NE	-40.71623	-32.83780	121.28237	B1	73	0.00000
1591	155	ARG	HE	-41.63763	-33.18145	121.09517	B1	73	0.00000
1592	155	ARG	CZ	-40.47089	-31.92135	122.22743	B1	73	0.00000
1593	155	ARG	NH1	-41.46382	-31.43599	122.94081	B1	73	0.00000
1594	155	ARG	NH11	-41.33886	-30.75247	123.65592	B1	73	0.00000
1595	155	ARG	NH12	-42.41818	-31.75018	122.77039	B1	73	0.00000
1596	155	ARG	NH2	-39.22715	-31.49669	122.45304	B1	73	0.00000

FIG. 26

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1597	156 AR	HH21	-39.02013	-30.81248	123.15141	B1	73	0.00000
1598	156 ARG	HH22	-38.47020	-31.56739	121.91409	B1	73	0.00000
1599	156 ARG	C	-40.66389	-35.07891	116.56312	B1	73	0.00000
1600	156 ARG	O	-41.80290	-35.51173	116.56408	B1	73	0.00000
1601	156 ALA	N	-40.28792	-34.01372	116.84199	B1	74	0.00000
1602	156 ALA	H	-39.31961	-33.75543	116.77185	B1	74	0.00000
1603	156 ALA	CA	-41.30773	-33.34228	116.03220	B1	74	0.00000
1604	156 ALA	CB	-40.72899	-32.10051	114.35248	B1	74	0.00000
1605	156 ALA	C	-41.91382	-34.25984	113.98113	B1	74	0.00000
1606	156 ALA	O	-43.11961	-34.40803	113.83911	B1	74	0.00000
1607	157 VAL	N	-40.99693	-34.92630	113.26026	B1	75	0.00000
1608	157 VAL	H	-40.04150	-34.58633	113.44609	B1	75	0.00000
1609	157 VAL	CA	-41.27013	-35.00533	112.34552	B1	75	0.00000
1610	157 VAL	CB	-39.86851	-35.59897	112.04095	B1	75	0.00000
1611	157 VAL	CG1	-39.79482	-35.01333	111.48596	B1	75	0.00000
1612	157 VAL	CG2	-39.10167	-35.63993	111.12688	B1	75	0.00000
1613	157 VAL	C	-42.31375	-37.01997	112.63333	B1	75	0.00000
1614	157 VAL	O	-43.41665	-37.10246	112.30297	B1	75	0.00000
1615	158 ASP	N	-41.95045	-37.78157	113.87061	B1	75	0.00000
1616	158 ASP	H	-41.06306	-37.68874	114.30470	B1	75	0.00000
1617	158 ASP	CA	-43.55816	-38.84272	114.32359	B1	75	0.00000
1618	158 ASP	CB	-42.09373	-39.82201	115.22733	B1	75	0.00000
1619	158 ASP	CG	-41.27306	-40.78302	114.39952	B1	75	0.00000
1620	158 ASP	OD1	-40.34839	-40.37834	113.70459	B1	75	0.00000
1621	158 ASP	OD2	-41.56822	-41.98359	114.41807	B1	75	0.00000
1622	158 ASP	C	-44.10643	-38.36706	115.04358	B1	75	0.00000
1623	158 ASP	O	-45.17033	-38.96720	114.93821	B1	75	0.00000
1624	159 THR	N	-43.96505	-37.25912	115.79961	B1	77	0.00000
1625	159 THR	H	-43.09027	-35.75113	115.86564	B1	77	0.00000
1626	159 THR	CA	-45.15504	-36.88791	116.55067	B1	77	0.00000
1627	159 THR	CB	-44.86388	-36.97162	116.07412	B1	77	0.00000
1628	159 THR	CG1	-45.06916	-37.10329	116.79712	B1	77	0.00000
1629	159 THR	CG2	-45.91547	-37.30091	119.72205	B1	77	0.00000
1630	159 THR	C	-44.03422	-35.82524	116.66004	B1	77	0.00000
1631	159 THR	O	-45.84489	-35.59150	116.12087	B1	77	0.00000
1632	159 THR	N	-47.05168	-35.51848	115.96768	B1	77	0.00000
1633	160 TYR	N	-45.05289	-34.84372	115.87048	B1	78	0.00000
1634	160 TYR	H	-44.05861	-34.64495	116.78833	B1	78	0.00000
1635	160 TYR	CA	-45.73493	-33.26591	115.64281	B1	78	0.00000
1636	160 TYR	CB	-44.74473	-32.10746	115.78675	B1	78	0.00000
1637	160 TYR	CG	-45.25402	-31.12355	116.81319	B1	78	0.00000
1638	160 TYR	CD1	-44.85214	-31.25590	116.16144	B1	78	0.00000
1639	160 TYR	CE1	-45.22919	-33.34310	119.12525	B1	78	0.00000
1640	160 TYR	CD2	-45.12744	-30.08443	116.42011	B1	78	0.00000
1641	160 TYR	CE2	-46.60347	-29.17117	117.38468	B1	78	0.00000
1642	160 TYR	CZ	-46.20180	-29.30409	116.73381	B1	78	0.00000
1643	160 TYR	OH	-45.86272	-28.41253	119.68223	B1	78	0.00000
1644	160 TYR	HH	-47.28242	-27.80044	119.27249	B1	78	0.00000
1645	160 TYR	C	-46.46009	-33.18254	114.31073	B1	78	0.00000
1646	160 TYR	O	-47.63057	-32.82968	114.21477	B1	78	0.00000
1647	161 CYS	N	-45.72598	-33.58992	113.36774	B1	79	0.00000
1648	161 CYS	H	-44.77052	-33.88209	113.40718	B1	79	0.00000
1649	161 CYS	CA	-46.32703	-33.68577	111.93544	B1	79	0.00000
1650	161 CYS	CB	-45.27134	-34.17403	110.93068	B1	79	0.00000
1651	161 CYS	CG	-46.67069	-33.83715	109.19024	B1	79	0.00000
1652	161 CYS	C	-47.53731	-34.60219	111.93084	B1	79	0.00000
1653	161 CYS	O	-46.55723	-34.29704	111.38273	B1	79	0.00000
1654	162 ARG	N	-47.37462	-35.72006	112.55592	B1	80	0.00000
1655	162 ARG	H	-46.47835	-35.94232	113.03882	B1	80	0.00000
1656	162 ARG	CA	-48.50678	-36.61784	112.89068	B1	80	0.00000
1657	162 ARG	CB	-48.07710	-37.71819	113.85476	B1	80	0.00000
1658	162 ARG	CG	-49.16346	-38.77197	114.12227	B1	80	0.00000
1659	162 ARG	CD	-48.67844	-40.04247	114.81829	B1	80	0.00000
1660	162 ARG	NE	-49.62321	-41.12379	114.54199	B1	80	0.00000

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1661	162	ARG	HE	-50.94	-40.88455	114.11092	B1	80	0.00000
1662	162	ARG	CZ	-49.3267	-42.40507	114.80601	B1	80	0.00000
1663	162	ARG	NH1	-50.23020	-43.32564	114.46730	B1	80	0.00000
1664	162	ARG	NH11	-50.11979	-44.31403	114.66150	B1	80	0.00000
1665	162	ARG	NH12	-51.06184	-43.06285	113.96028	B1	80	0.00000
1666	162	ARG	NH2	-48.19839	-42.76163	115.38323	B1	80	0.00000
1667	162	ARG	NH21	-48.00134	-43.72771	115.55650	B1	80	0.00000
1668	162	ARG	NH22	-47.52579	-42.06788	115.64161	B1	80	0.00000
1669	162	ARG	C	-49.75512	-35.92906	113.42487	B1	80	0.00000
1670	162	ARG	O	-50.82093	-35.93732	112.81658	B1	80	0.00000
1671	163	HIS	N	-49.58593	-35.31862	114.60088	B1	81	0.00000
1672	163	HIS	H	-48.68252	-35.28035	115.03933	B1	81	0.00000
1673	163	HIS	CA	-50.76431	-34.73357	115.23467	B1	81	0.00000
1674	163	HIS	CB	-50.42874	-34.29045	116.66134	B1	81	0.00000
1675	163	HIS	CG	-50.41026	-35.50649	117.55950	B1	81	0.00000
1676	163	HIS	ND1	-51.51644	-36.01842	118.12240	B1	81	0.00000
1677	163	HIS	HD1	-52.42830	-35.67431	118.03242	B1	81	0.00000
1678	163	HIS	CD2	-49.31404	-36.28837	117.93420	B1	81	0.00000
1679	163	HIS	NE2	-49.78030	-37.28089	118.73130	B1	81	0.00000
1680	163	HIS	CE1	-51.13423	-37.11585	118.84798	B1	81	0.00000
1681	163	HIS	C	-51.37160	-33.59588	114.44466	B1	81	0.00000
1682	163	HIS	O	-52.56947	-33.55956	114.18659	B1	81	0.00000
1683	164	ASN	N	-50.50246	-32.67616	114.01202	B1	82	0.00000
1684	164	ASN	H	-49.51981	-32.74462	114.21247	B1	82	0.00000
1685	164	ASN	CA	-51.04300	-31.58239	113.20331	B1	82	0.00000
1686	164	ASN	CB	-49.96583	-30.54361	112.89196	B1	82	0.00000
1687	164	ASN	CG	-49.91907	-29.53869	114.02377	B1	82	0.00000
1688	164	ASN	OD1	-49.13948	-29.62233	114.96163	B1	82	0.00000
1689	164	ASN	ND2	-50.80473	-28.55321	113.91309	B1	82	0.00000
1690	164	ASN	HD21	-51.44311	-28.49843	113.14586	B1	82	0.00000
1691	164	ASN	HD22	-50.84210	-27.84178	114.61251	B1	82	0.00000
1692	164	ASN	C	-51.70674	-32.02333	111.91584	B1	82	0.00000
1693	164	ASN	O	-52.73418	-31.48662	111.51085	B1	82	0.00000
1694	165	TYR	N	-51.12326	-33.05626	111.29191	B1	83	0.00000
1695	165	TYR	H	-50.28201	-33.49370	111.62194	B1	83	0.00000
1696	165	TYR	CA	-51.81304	-33.54151	110.10401	B1	83	0.00000
1697	165	TYR	CB	-50.52781	-34.47239	109.25048	B1	83	0.00000
1698	165	TYR	CG	-51.39689	-34.50284	107.80317	B1	83	0.00000
1699	165	TYR	CD1	-52.18946	-33.44669	107.29137	B1	83	0.00000
1700	165	TYR	CE1	-52.63312	-33.47413	105.96126	B1	83	0.00000
1701	165	TYR	CD2	-51.04289	-35.58963	106.96903	B1	83	0.00000
1702	165	TYR	CE2	-51.48846	-35.61522	105.62740	B1	83	0.00000
1703	165	TYR	CZ	-52.28557	-34.55457	105.13440	B1	83	0.00000
1704	165	TYR	OH	-52.75931	-34.53152	103.84155	B1	83	0.00000
1705	165	TYR	HH	-52.13515	-34.97162	103.24416	B1	83	0.00000
1706	165	TYR	C	-53.16114	-34.17050	110.39688	B1	83	0.00000
1707	165	TYR	O	-54.17243	-33.75040	109.85354	B1	83	0.00000
1708	166	GLY	N	-53.16827	-35.13255	111.32677	B1	84	0.00000
1709	166	GLY	H	-52.30920	-35.44284	111.74443	B1	84	0.00000
1710	166	GLY	CA	-54.44388	-35.75931	111.69489	B1	84	0.00000
1711	166	GLY	C	-55.55421	-34.78683	112.08191	B1	84	0.00000
1712	166	GLY	O	-56.70058	-34.86763	111.64884	B1	84	0.00000
1713	167	VAL	N	-55.16433	-33.81049	112.90998	B1	85	0.00000
1714	167	VAL	H	-54.21931	-33.77699	113.25020	B1	85	0.00000
1715	167	VAL	CA	-56.14083	-32.77588	113.26808	B1	85	0.00000
1716	167	VAL	CB	-55.54422	-31.87200	114.36486	B1	85	0.00000
1717	167	VAL	CG1	-56.46931	-30.71890	114.75691	B1	85	0.00000
1718	167	VAL	CG2	-55.22649	-32.70528	115.60849	B1	85	0.00000
1719	167	VAL	C	-56.62003	-31.96437	112.06515	B1	85	0.00000
1720	167	VAL	O	-57.80658	-31.70971	111.87315	B1	85	0.00000
1721	168	GLY	N	-55.65605	-31.61592	111.20320	B1	86	0.00000
1722	168	GLY	H	-54.68827	-31.81924	111.38362	B1	86	0.00000
1723	168	GLY	CA	-56.04215	-30.94490	109.94972	B1	86	0.00000
1724	168	GLY	C	-57.02338	-31.77629	109.11567	B1	86	0.00000

FIG. 28

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1725	168	GLY	-58.	49	-31.28044	108.61617	B1	86	0.00000
1726	169	GLU	N	-56.71134	-33.07169	109.00665	B1	87	0.00000
1727	169	GLU	H	-55.87921	-33.43085	109.43169	B1	87	0.00000
1728	169	GLU	CA	-57.59179	-34.00467	108.30469	B1	87	0.00000
1729	169	GLU	CB	-56.95070	-35.39155	108.28846	B1	87	0.00000
1730	169	GLU	CG	-55.67851	-35.40281	107.43481	B1	87	0.00000
1731	169	GLU	CD	-54.91259	-36.69049	107.65905	B1	87	0.00000
1732	169	GLU	OE1	-53.74095	-36.61342	108.02205	B1	87	0.00000
1733	169	GLU	OE2	-55.48540	-37.76250	107.47736	B1	87	0.00000
1734	169	GLU	C	-59.00151	-34.05273	108.86565	B1	87	0.00000
1735	169	GLU	O	-59.98966	-34.06690	108.14126	B1	87	0.00000
1736	170	SER	N	-59.06996	-33.99305	110.19884	B1	88	0.00000
1737	170	SER	H	-50.23138	-34.05998	110.74831	B1	88	0.00000
1738	170	SER	CA	-60.38255	-33.85094	110.83391	B1	88	0.00000
1739	170	SER	CB	-60.18950	-33.85581	112.35798	B1	88	0.00000
1740	170	SER	OG	-61.42043	-34.13237	113.03659	B1	88	0.00000
1741	170	SER	HG	-61.30877	-34.00943	113.98374	B1	88	0.00000
1742	170	SER	C	-61.16415	-32.61665	110.37646	B1	88	0.00000
1743	170	SER	O	-62.31497	-32.69150	109.96191	B1	88	0.00000
1744	171	PHE	N	-60.49231	-31.45621	110.41676	B1	89	0.00000
1745	171	PHE	H	-59.54601	-31.41832	110.75393	B1	89	0.00000
1746	171	PHE	CA	-61.19539	-30.24631	109.95663	B1	89	0.00000
1747	171	PHE	CB	-60.30793	-28.99941	110.10880	B1	89	0.00000
1748	171	PHE	CG	-59.94208	-28.68147	111.54294	B1	89	0.00000
1749	171	PHE	CD1	-58.59291	-20.39703	111.85413	B1	89	0.00000
1750	171	PHE	CD2	-60.93098	-20.63398	112.55491	B1	89	0.00000
1751	171	PHE	CE1	-58.23032	-28.06074	113.17656	B1	89	0.00000
1752	171	PHE	CE2	-60.56845	-28.29967	113.87858	B1	89	0.00000
1753	171	PHE	CZ	-59.21901	-28.01319	114.18527	B1	89	0.00000
1754	171	PHE	C	-61.62802	-30.29139	108.49502	B1	89	0.00000
1755	171	PHE	O	-62.68697	-29.84047	108.07691	B1	89	0.00000
1756	172	THR	N	-60.72520	-30.85206	107.69903	B1	90	0.00000
1757	172	THR	H	-59.91792	-31.29854	108.09636	B1	90	0.00000
1758	172	THR	CA	-60.04308	-30.66246	106.25599	B1	90	0.00000
1759	172	THR	CB	-59.41710	-30.70747	105.70165	B1	90	0.00000
1760	172	THR	OG1	-59.35292	-30.21143	104.36207	B1	90	0.00000
1761	172	THR	HG1	-60.15430	-30.48800	103.89285	B1	90	0.00000
1762	172	THR	CG2	-58.90262	-32.13906	105.74825	B1	90	0.00000
1763	172	THR	C	-61.71208	-31.64677	105.47987	B1	90	0.00000
1764	172	THR	O	-61.76078	-31.56505	104.25169	B1	90	0.00000
1765	173	VAL	N	-62.32957	-32.60764	106.19315	B1	91	0.00000
1766	173	VAL	H	-62.28706	-32.56397	107.19363	B1	91	0.00000
1767	173	VAL	CA	-62.87984	-33.81113	105.53718	B1	91	0.00000
1768	173	VAL	CB	-63.87967	-34.51911	106.47899	B1	91	0.00000
1769	173	VAL	CG1	-64.50006	-35.77324	105.85034	B1	91	0.00000
1770	173	VAL	CG2	-63.20452	-34.90248	107.79466	B1	91	0.00000
1771	173	VAL	C	-63.51710	-33.59419	104.16716	B1	91	0.00000
1772	173	VAL	O	-63.18750	-34.24452	103.18126	B1	91	0.00000
1773	174	GLN	N	-64.41211	-32.59570	104.14711	B1	92	0.00000
1774	174	GLN	H	-64.59818	-32.11269	105.00138	B1	92	0.00000
1775	174	GLN	CA	-65.14373	-32.19104	102.94243	B1	92	0.00000
1776	174	GLN	CB	-65.76132	-30.80951	103.22574	B1	92	0.00000
1777	174	GLN	CG	-66.77986	-30.26016	102.21318	B1	92	0.00000
1778	174	GLN	CD	-66.09397	-29.58024	101.04012	B1	92	0.00000
1779	174	GLN	OE1	-65.45924	-20.54065	101.15380	B1	92	0.00000
1780	174	GLN	NE2	-66.26402	-30.18961	99.87453	B1	92	0.00000
1781	174	GLN	HE21	-66.63226	-31.11966	99.82928	B1	92	0.00000
1782	174	GLN	HE22	-65.97833	-29.74839	99.02730	B1	92	0.00000
1783	174	GLN	C	-64.36067	-32.16074	101.63553	B1	92	0.00000
1784	174	GLN	O	-64.88582	-32.51356	100.57991	B1	92	0.00000
1785	175	ARG	N	-63.09233	-31.77447	101.72327	B1	93	0.00000
1786	175	ARG	H	-62.69754	-31.53564	102.62225	B1	93	0.00000
1787	175	ARG	CA	-62.31707	-31.78635	100.50018	B1	93	0.00000
1788	175	ARG	CB	-61.85817	-30.36631	100.16958	B1	93	0.00000

FIG. 29

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1789	175	ARG	CG	-61.24395	-30.26914	98.77310	B1	93	0.00000
1790	175	ARG	CD	-60.91597	-28.04209	98.34709	B1	93	0.00000
1791	175	ARG	NE	-59.98117	-28.87216	97.22615	B1	93	0.00000
1792	175	ARG	HE	-59.59146	-29.76910	97.00518	B1	93	0.00000
1793	175	ARG	CZ	-59.49795	-27.74924	96.68186	B1	93	0.00000
1794	175	ARG	NH1	-58.57343	-27.83579	95.72833	B1	93	0.00000
1795	175	ARG	HH11	-58.19414	-27.02728	95.28229	B1	93	0.00000
1796	175	ARG	HH12	-58.22480	-28.73459	95.46034	B1	93	0.00000
1797	175	ARG	NH2	-59.92427	-26.55682	97.09593	B1	93	0.00000
1798	175	ARG	HH21	-59.57028	-25.70796	96.70808	B1	93	0.00000
1799	175	ARG	HH22	-60.60311	-26.50975	97.82696	B1	93	0.00000
1800	175	ARG	C	-61.17336	-32.79150	100.46150	B1	93	0.00000
1801	175	ARG	O	-61.02327	-33.52738	99.49809	B1	93	0.00000
1802	176	ARG	N	-60.36493	-32.85103	101.53216	B1	94	0.00000
1803	176	ARG	H	-60.53761	-32.31340	102.35642	B1	94	0.00000
1804	176	ARG	CA	-59.25084	-33.80802	101.41499	B1	94	0.00000
1805	176	ARG	CB	-58.18750	-33.62483	102.49829	B1	94	0.00000
1806	176	ARG	CG	-57.32871	-32.37173	102.34974	B1	94	0.00000
1807	176	ARG	CD	-56.27515	-32.28237	103.45854	B1	94	0.00000
1808	176	ARG	NE	-56.30062	-30.94018	104.04511	B1	94	0.00000
1809	176	ARG	HE	-56.83150	-30.25818	103.53710	B1	94	0.00000
1810	176	ARG	CZ	-55.69078	-30.63659	105.15759	B1	94	0.00000
1811	176	ARG	NH1	-55.74431	-29.38340	105.64628	B1	94	0.00000
1812	176	ARG	HH11	-55.30471	-29.10555	106.50132	B1	94	0.00000
1813	176	ARG	HH12	-56.24080	-28.69008	105.12278	B1	94	0.00000
1814	176	ARG	NH2	-55.05038	-31.57276	105.85297	B1	94	0.00000
1815	176	ARG	HH21	-54.58912	-31.37726	106.75753	B1	94	0.00000
1816	176	ARG	HH22	-55.02183	-32.51329	105.54660	B1	94	0.00000
1817	176	ARG	C	-59.64666	-35.27348	101.42902	B1	94	0.00000
1818	176	ARG	O	-58.87808	-36.15316	101.06767	B1	94	0.00000
1819	177	VAL	N	-60.88626	-35.53390	101.85272	B1	95	0.00000
1820	177	VAL	H	-61.51901	-34.82991	102.18430	B1	95	0.00000
1821	177	VAL	CA	-61.32863	-36.91608	101.70299	B1	95	0.00000
1822	177	VAL	CB	-61.79519	-37.47193	103.06780	B1	95	0.00000
1823	177	VAL	CG1	-61.84113	-39.00335	103.05589	B1	95	0.00000
1824	177	VAL	CG2	-60.88761	-37.00753	104.21299	B1	95	0.00000
1825	177	VAL	C	-62.41412	-37.02458	100.63553	B1	95	0.00000
1826	177	VAL	O	-63.44404	-37.67295	100.79118	B1	95	0.00000
1827	178	HIS	N	-62.14889	-36.33028	99.52296	B1	96	0.00000
1828	178	HIS	H	-61.32158	-35.77698	99.39184	B1	96	0.00000
1829	178	HIS	CA	-63.09845	-36.32813	98.41659	B1	96	0.00000
1830	178	HIS	CB	-64.01495	-35.10064	98.57314	B1	96	0.00000
1831	178	HIS	CG	-65.27852	-35.21481	97.74669	B1	96	0.00000
1832	178	HIS	ND1	-65.30573	-35.62002	96.46944	B1	96	0.00000
1833	178	HIS	HD1	-64.50806	-35.91855	95.96816	B1	96	0.00000
1834	178	HIS	CD2	-66.58524	-34.92566	98.14872	B1	96	0.00000
1835	178	HIS	NE2	-67.39749	-35.16505	97.08780	B1	96	0.00000
1836	178	HIS	CE1	-66.60728	-35.59364	96.05191	B1	96	0.00000
1837	178	HIS	C	-62.34621	-36.29235	97.09131	B1	96	0.00000
1838	178	HIS	OCT1	-61.22615	-35.78756	97.07091	B1	96	0.00000
1839	178	HIS	OCT2	-62.87363	-36.77415	96.08799	B1	96	0.00000

FIG. 30

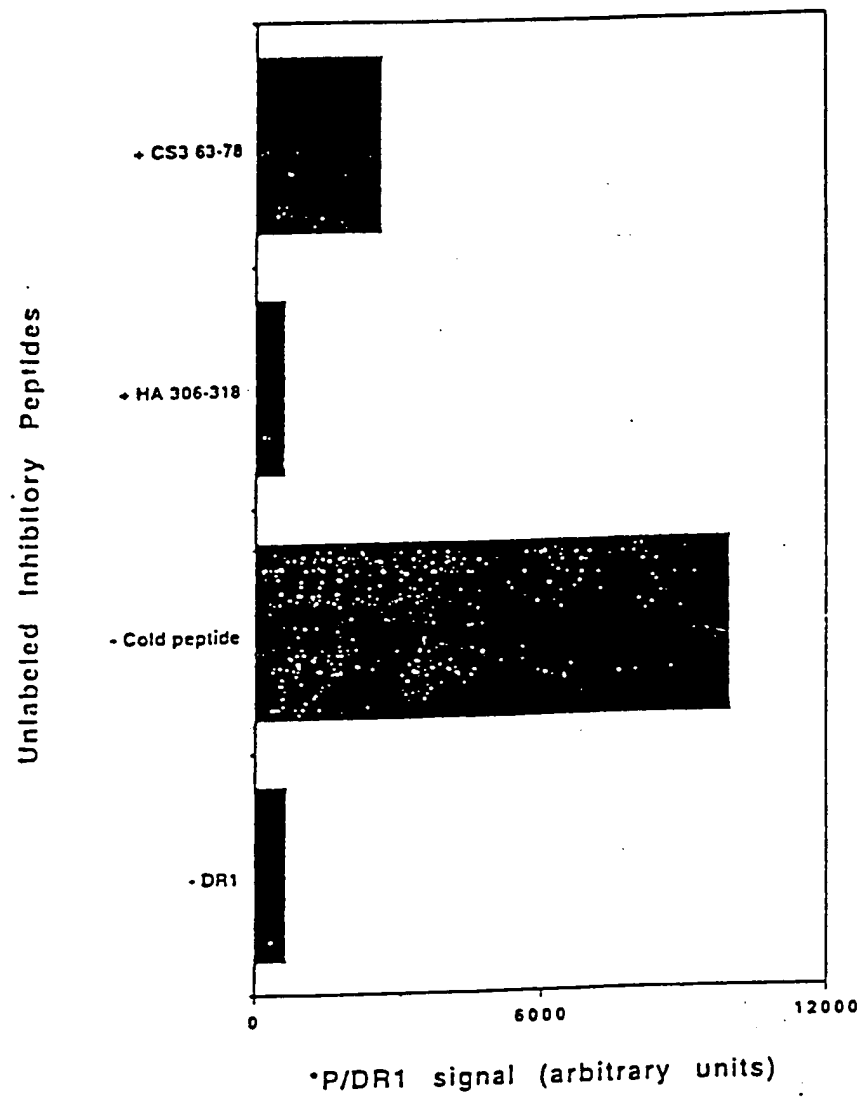
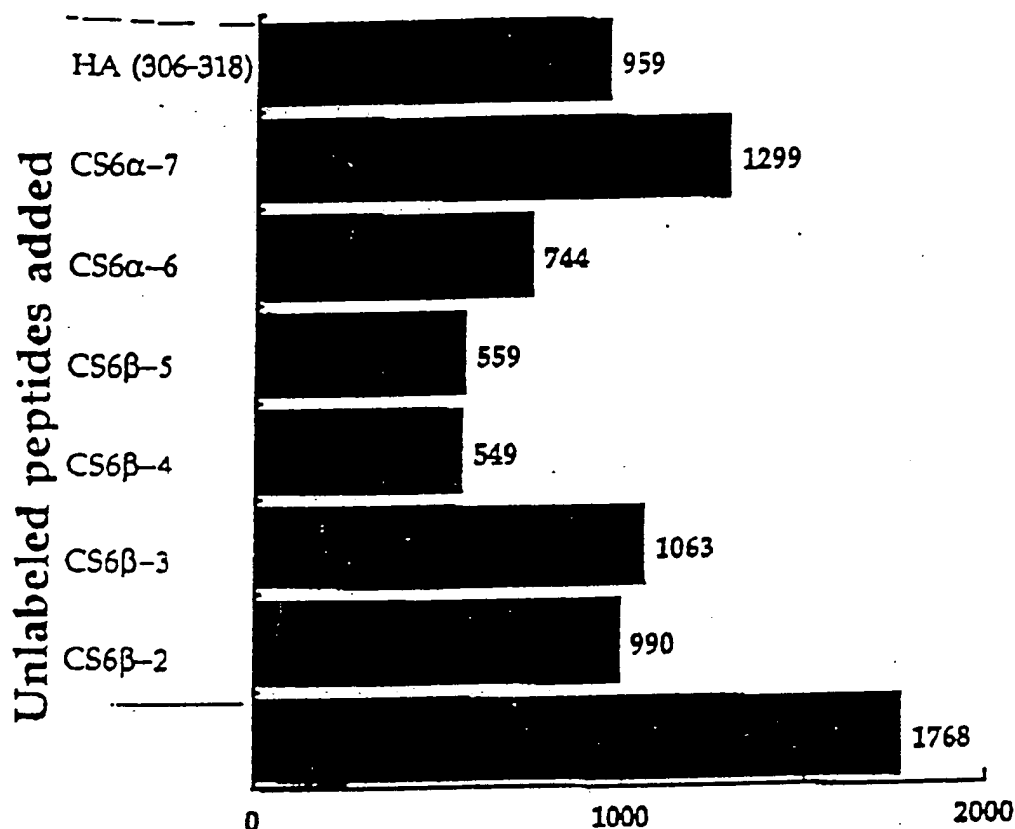


FIG. 31

Inhibition of ^{125}I HA(306-318)/DR1 by unlabeled CS6 α and β peptides



*HA/DR1 compact dimer signal
(densitometric units)